







December 2008



To the reader:

Imagine a place to hike, cycle, paddle your kayak, or quietly sit at the river's edge – all within just a short drive or walk from Northern Kentucky's urban core along the Licking River. The exciting concept of a multi-purpose Licking River Greenway emerged from the collective thinking of community leaders during strategic planning sessions sponsored by Vision 2015 a couple years ago. During the past year, the master planning process combined innovative design by Woolpert and Human Nature, the dedication of the Greenway Steering Committee and Civic Engagement Team, and enthusiastic community input with funding support from Vision 2015 and its partners. This synergy has produced a master plan that brings us to the threshold of transforming the abstract into reality.

These pages reveal detailed information about the abundant cultural and natural resources of the five-mile Licking River corridor in both Campbell and Kenton counties, from the Alvin C. Poweleit Bridge spanning the river on I-275 to the Licking's historic confluence with the Ohio River. The corridor's surprising hidden assets are waiting to be rediscovered as the greenway plan unfolds. To be realistic, the plan examines both opportunities and constraints inherent in developing individual segments of the trail system in the coming years. Perhaps my favorite part is the recommended initial implementation plan, because it indicates where we could begin trail development in the near future. The possibilities for new recreational opportunities, water quality improvement, wildlife enhancement, and environmental and cultural education along the river corridor are limited only by our imagination and our commitment to seek resources to develop the trail system to its fullest potential.

So let's not let this plan collect dust on a shelf. Many challenges lie ahead, but with persistence and determination, the Licking River Greenway can take shape to become a legacy to benefit future generations in our region. The words on our project logo describe the greenway well — where Northern Kentucky comes together. Both literally and figuratively, we can come together to make the greenway a reality!



Lorna Harrell, Chair Licking River Greenway Steering Committee

Jorna Skrull

For information on how you can get involved in this project, visit our web site www.vision2015.org.

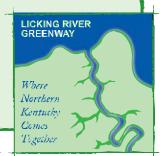
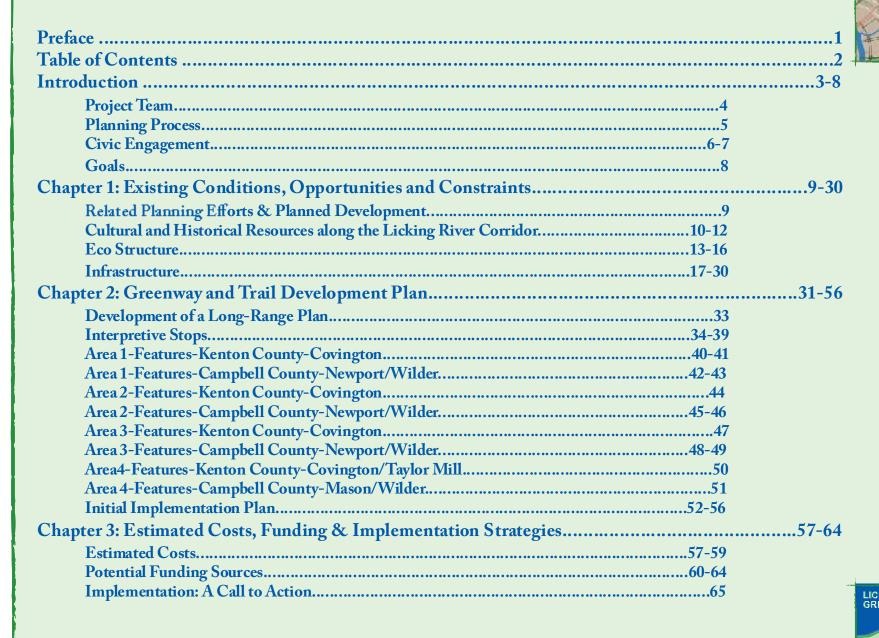


Table of Contents





Together

Introduction

The concept of a Licking River Greenway is one of many initiatives to improve the economy and quality of life in Northern Kentucky that were generated by community leaders under the guidance of Vision 2015. The Licking River Greenway Master Plan goes beyond the initial vision to create a framework for establishing a continuous green corridor threading through the Licking River communities of Covington and Taylor Mill in Kenton County and Newport and Wilder in Campbell County. The plan is multi-faceted, presenting details for developing bicycle and pedestrian trails, creating new river access points, and enhancing habitat along the banks of the Licking River, while making connections with parks, schools and other existing facilities in adjoining neighborhoods. Open spaces and existing street systems near the river's edge have been integrated into the five-mile study corridor.

Looking to the near future, the plan recommends ways to connect with other existing or planned pathways and projects along the Ohio River and Banklick Creek. Looking further ahead, implementation of the plan could result in a greenway system that could become an outstanding component of a more comprehensive Northern Kentucky regional park system.

Location and Study Area

The study area is located in Northern Kentucky, a part of the Greater Cincinnati Metropolitan Statistical Area. This phase of the study encompasses the Licking River Corridor from the confluence with the Ohio River to I-275 and the adjoining communities of Covington, Taylor Mill, Newport and Wilder, Kentucky. Two counties are involved, Kenton County, home to Covington and Taylor Mill, and Campbell County, home to Newport and Wilder. Figure 1 shows the location of the study area within the greater region.

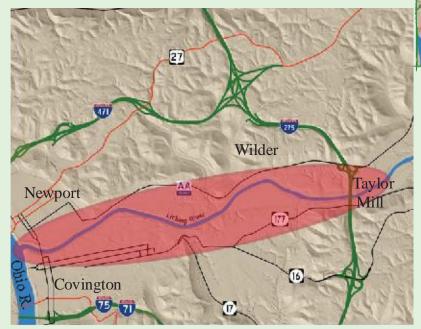


Figure1: Study Area Location



Area 1: Confluence



Area 3: Golf Course

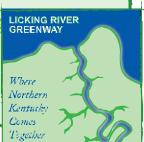


Area 2: Industrial Core



Area 4: Southern Gateway

Note: All base data for mapping from Northern Kentucky Area Planning Commission LINK GIS



Project Team

Vision 2015 is a catalyst for growth and change that has developed a 10-year strategic plan for Northern Kentucky. Vision 2015 consists of a small staff and a large, diverse group of business and community volunteers known as the Regional Stewardship Council.

One of Vision 2015's committees, the Licking River Greenway Steering Committee, chaired by Lorna Harrell, was responsible for the development of the Greenway Master Plan. Members of the Licking River Greenway Steering Committee include:

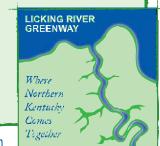


Lorna Harrell, LR Steering Committee Chair Sherry Carran, Covington City Commissioner Lajuanda Haight-Maybriar, KY Division of Water Jill Bailey, Taylor Mill Administrator Marc Hult, Licking River Watershed Watch Peter Klear, Campbell Co. Planning Commission Larry Klein, Assistant City Manager, Covington Tom Miller, Retired from Drees Bill Moller, Covington Assistant City Manager Kenneth O'Dea, Vivian Llambi & Associates Roger Peterman, Northern KY Port Authority Mike Phillips, Vision 2015 Park Task Force Chair Janet Scanlon, Kenton Conservancy Bill Scheyer, President, SouthBank Partners Mindy Scott, Northern KY Sanitation District 1 Wayne Spiegel, Kenton Co. Fiscal Court Marg Theuer, Cincinnati Rowing Club Patricia Timm, Civic Engagement Team Chair Matt Wooten, Northern KY Sanitation District 1 Bill Wulfeck, Northern KY Water District Michael Hammons, President Vision 2015 Mark Raines, Vision 2015 Greg Tulley, City of Newport Planning Director Terry Vance, City of Wilder Administrator John Heilman, OKI Don Burrell, OKI Matt Dressman, St. Elizabeth Hospital Chris Manning, Human Nature Gary Wolnitzek, Human Nature Nicole DiNovo, Human Nature Karen Ren, Human Nature Bruce Rankin, Project Director Woolpert Emi Randall, Project Manager Woolpert John Cody, Woolpert

Greenway Vision

The Licking River Greenway is envisioned as a continuous riverfront corridor that encompasses riverbank stabilization and provides a multi-level trail system that connects the partner communities. Riverbank stabilization and the development of a continuous public recreational corridor are the primary goals of the project. Enhanced connections between the river greenway and the adjacent communities are expected to foster further economic development within each partner community. The Greenway Master Plan describes actions to further increase economic and recreational utilization of the river corridor in a sustainable manner.





Planning Process

The process included extensive public input through a stakeholder steering committee and public workshops. Guided by this public input, a team of planning and design professionals developed a plan to link continuous public access along the river and into the surrounding neighborhoods.

Phase I - Site Inventory and Analysis

- 1. The design team obtained, reviewed, and analyzed recent digital aerial photos, as well as infrastructure maps, land use, and planning maps.
- 2.On-site reconnaissance was conducted by team members who walked and drove as much of the area as practical, however the site's terrain limited the reconnaissance. Vision 2015 obtained permission to access key properties in the corridor from property owners.
- 3. Stakeholder interviews the team interviewed key stakeholders, identified by the Steering Committee.

Steering Committee Meeting 1

The design team met with the Steering Committee to review findings in site inventory and analysis.

Phase II - Detailed Assessment

The team mapped study area limits and preliminary Greenway boundaries based on physiography, natural resources, and land use. The team considered the influences of the river, the connections, access to the river and neighborhoods, overall connectivity to the open space, and transportation systems. The team then developed two potential trail alternatives.

Steering Committee Meeting 2

The Steering Committee reviewed the preliminary alignments prior to the civic engagement process. The design team made revisions as agreed upon and the presentation materials were provided to the civic engagement team.

Phase III - Master Planning

Preliminary Master Plan & Opinion of Probable Costs

The Preliminary Master Plan and estimates of the probable construction cost were developed based on the preferred alignments and priority alignment segments.

Civic Engagement Process

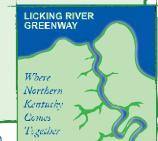
The Civic Engagement process, described in greater detail on the following page, was conducted by a team of volunteers led by Patricia Timm. This team met with numerous civic groups to gain valuable public input.

Community Presentation/Working Meeting

The civic engagement and design team presented the Preliminary Master Plan and Cost Estimate at a public meeting organized and conducted by the Steering Committee and attended by more than 100 people.

Final Master Plan Report & Estimate of Probable Costs

The Final Plan Phasing Concept and Cost Estimate were developed based on Steering Committee review and public comments.



Civic Engagement

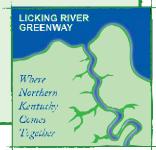
During the spring and summer of 2008, the Civic Engagement Team met with numerous representatives from the public and private sector, and engaged citizens who exhibited interest and support. The efforts of this team helped shape the plan and highlighted the importance of representing the diverse interests of the community. Most importantly, the team developed vast community support for the project. Following is a list of groups that participated in the civic engagement process:

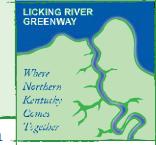
Community and Stakeholder Groups

Covington Rivers and Greenspace Team Historic Licking Riverside Group Kenton County Conservation District East Row Historic District in Newport Lewisburg Neighborhood Association Mutter Gottes Neighborhood Association The Residents of Mainstrasse Westside Action Coalition Wallace Woods Neighborhood Association Lavassor Park Neighborhood Association Austinburg Neighborhood Association South Covington Neighborhood Association Kenton Conservancy Campbell Conservancy Northern Kentucky Port Authority Kentucky Division of Water Northern Kentucky Sanitation District #1 Cincinnati Rowing Club Vivian Llambi & Associates Northern Kentucky Water District Northern Kentucky Area and Planning Commission









Civic Engagement



Community and Stakeholder Groups (continued)

Newport's Westside Citizen's Coalition

East and West Latonia Neighborhood Associations

Kentucky Bike Commission

SouthBank Partners

OKI Regional Conservation Council

Friends of the CVG Trail

Covington Business Council

Latonia Business Association

Friends of Covington

Mainstrasse Village Association

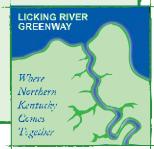
Property Owners

Marathon Oil
Rizzo Brothers Painting
River City Metals / David J. Joseph Company
Corporex
IPSCO Tubular (formerly Newport Steel)
Twin Oaks Golf Course
The Northern Kentucky Port Authority

Local Governments

City of Covington
City of Newport
City of Wilder
City of Taylor Mill
Kenton County Fiscal Court
Campbell County Fiscal Court





Goals

The Licking River Greenway will link Northern Kentucky communities to the Ohio River through a continuous riparian habitat, which must be protected for future generations.

The Licking River Greenway Master Plan envisions a greenway corridor that will:



Current pedestrian path in Covington

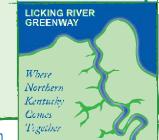


Top of levee in Covington looking toward downtown.

- Knit surrounding communities, regional open space systems, neighborhood parks and other community assets together via trails along the Licking River.
- Provide opportunities for recreation, fitness and alternative transportation trails that connect with existing or planned trail systems.
- Maximize the scenic quality and recreational value of the river valley with new facilities and enhancements.
- Protect water quality by preserving riparian forests that provide wildlife habitat and help manage storm water.
- Identify and integrate planning and development initiatives that will serve as templates for future land use near the Licking River, particularly along the Campbell County side.
- Become an economic asset to Northern Kentucky by promoting development and redevelopment opportunities that will attract new businesses and create new jobs.
- Improve the ecological health of the Licking River, its tributaries and riparian habitats.
- Build upon the assets and infrastructure that currently exist or are already planned.
- Celebrate and preserve the unique cultural and natural assets of the river corridor and adjacent communities.







Related Planning Efforts and Planned Development

Several ongoing planning and development initiatives will influence decisions affecting the Licking River.

Riverfront Commons

The recently started Riverfront Commons project coordinates riverbank stabilization strategies and public access enhancements along a 2.75 mile corridor of the south bank of the Ohio River in the communities of Covington, Newport and Bellevue, Kentucky. Riverfront Commons is envisioned as a continuous riverfront corridor that provides improved riverbank stabilization and an uninterrupted recreational trail system that connects and supports current and future riverfront development efforts in each of the partner communities. Riverbank stabilization and the development of a continuous public recreational corridor are primary goals of the project. Enhanced connections between the riverfront and the adjacent downtown districts are anticipated to foster further economic development within the partner communities.

This project is the northern anchor of the Licking River Greenway, connecting to the greenway at the 4th Street Bridge in Covington and Newport.

Ovation

Ovation is a planned neighborhood redevelopment near the confluence of the Ohio and Licking Rivers in Newport. As currently proposed, this large scale redevelopment features over 100 town homes, 726 condominiums, 1,100,000 square feet of office space, 114,000 square feet of retail space, an 88,000 square foot "big box" retail space, a 3,000 seat entertainment showroom and two hotels. The plan also calls for a marina and a pedestrian bridge connecting the redevelopment to Covington's Riverside Drive. The existing earthen levee will be lined with town homes raised to levee elevation to take advantage of river and skyline views.

This development will greatly influence investment in local infrastructure and improve amenities along the riverfront. This project will also draw residents and businesses to the north end of the Licking River corridor. Ovation will feature access points to both the Ohio and Licking Rivers and the trail system and will likely serve as a destination point for greenway users.

Extension of Route 9

Currently, the Kentucky Transportation Cabinet is exploring alignment options to extend Route 9, the AA Highway, along the Licking River to meet Route 8 in downtown Newport. This planned road expansion will have a dramatic impact on the redevelopment of the area and future land uses along the Licking River in Campbell County. It can improve access and open opportunities for bicycle or pedestrian trails.

The planned KY9 extension not only will extend a major state transportation route to the Ohio River at Ovation but also creates a major opportunity to develop a multiuse corridor along the Licking River.

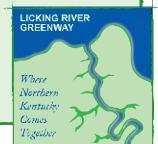




Ovation



Riverfront Commons



Cultural and Historical Resources along the Licking River Corridor

General James Taylor Park, Newport

The General James Taylor Park, located at the confluence of the Licking and Ohio Rivers in Newport, features paths, a picnic area, playground, benches, scenic river views and Cincinnati Skyline. Park facilities memorialize the site of the Newport Barracks and Civil War events. A walkway with access stairs and ramps is located atop the levee running from the downstream side of the Taylor Southgate Bridge to the 4th Street Bridge. The park is home to the Cincinnati Rowing Club boathouse housed beneath the 4th Street Bridge.

Newport Riverwalk

Completed in 1995, Newport's Riverwalk begins at the foot of Columbia Street. Steps lead to the halfmile walk atop the earthen levee. The Riverwalk follows the river westward, then turns south down the Licking River before connecting with Fourth Street. Newport's history is interpreted throughout the walk on seven decorative weather vanes. The Riverwalk is an important pedestrian link to Covington at the 4th Street Bridge and to the entertainment complex at Newport on the Levee.

Watkins Park and Newport Community Center

The Community Center located at 400 W. 6th Street and Patterson Street in Newport provides recreational programs and other services to residents of the City of Newport. In addition to programs for all ages, the Center offers a fitness room with treadmills, stationary bikes, and other fitness equipment.

Riverside Drive, Covington

This park is located on Riverside Drive in Covington just west and downstream of the confluence of the Licking and Ohio Rivers. Used for passive recreation, the park features an overlook at the corner of Riverside Drive and Shelby Street, brick sidewalks, benches, and interpretive public art.

George Rogers Clark Park, Covington

Located south of Riverside Drive at the corner of Garrard and Riverside Drive, this small park features historic stone walls along the street, seating areas, a sculpture, and mature shade trees.

Frederick's Landing, Wilder

Located on the Licking River in Wilder, this public park offers both passive and active recreation featuring a playground, picnic areas, and birding trail. It has the only public boat launch on this section of the Licking River.

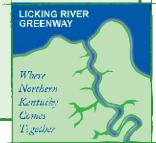
Wiggins Battery

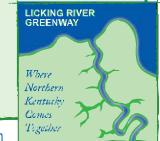
The hill east of the AA Highway above the confluence of Three Mile Creek and the Licking River is the site of the former Wiggins Civil War Battery. The battery was named after Samuel Wiggins, a banker and developer who built Cincinnati's Wiggins Block on Fountain Square.











Cultural and Historical Resources along the Licking River Corridor (continued)

Green Land Uses

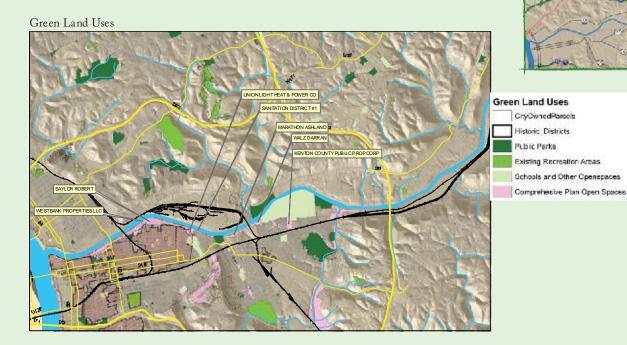
Green land uses include public parks, recreation areas, open spaces and certain types of public lands (e.g., schools). These areas provide both natural and social benefits to residents and visitors in the entire Northern Kentucky region. A challenge of the greenway is to connect what might otherwise be disconnected pieces of green space.

Historical Features

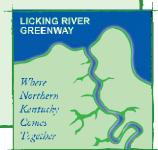
The study area has a rich history that has influenced the development of both Northern Kentucky and Greater Cincinnati. Steel and iron manufacturing, as well as distilleries, lined the Licking River's shore. Evidence of these land uses still exist. Ferries operated along the Licking River, and the Newport and Covington Suspension Bridge connected the two cities in 1853.

Covington Historical Levee

Between the Covington Levee and Licking River were many historical industrial structures such as Covington Gas Light Co., Licking Iron Works, and Dorsel & Wolftaney Distillery. While many of these structures no longer remain, this rich history may be interpreted along the greenway.







Cultural and Historical Resources along the Licking River Corridor (continued)

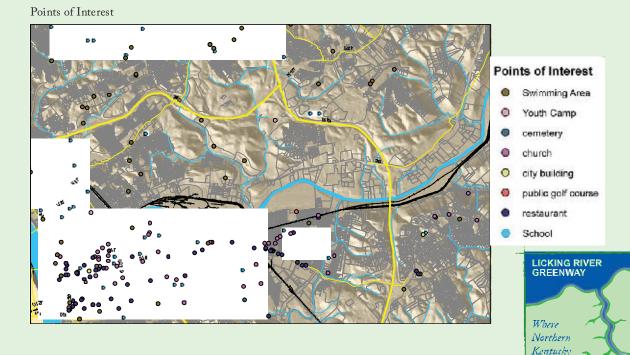
Civil War Overlay Map

In the summer of 1862, Union Troops constructed numerous fortifications and batteries near the Licking River in Northern Kentucky. These batteries help protect Cincinnati and river transportation into and out of the area. Batteries that surrounded the Licking River included the Wiggins, Larz Anderson, and Burnet batteries. Wiggins Battery, previously mentioned, honors the memory of Samuel Wiggins, a banker, realtor, and financier who built Wiggins Block on Cincinnati's Fountain Square.

Additional Points of Interest

The study area is a 'hot spot' of activity, containing numerous other points of interest that help retain residents and attract visitors. These points include swimming areas, youth camps, cemeteries, churches, city buildings, golf courses, restaurants, and schools.





Together

Eco Structure

Covington Loop Trail

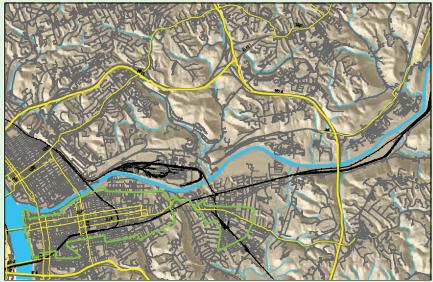
A proposed trail loop in Covington would run along the western side of the Licking River. The trail not only has the potential to connect many cultural resources in the area, but also provides an important link to the Licking River Greenway. This trail is shown in green on the Covington Loop Trail Map.

Watersheds

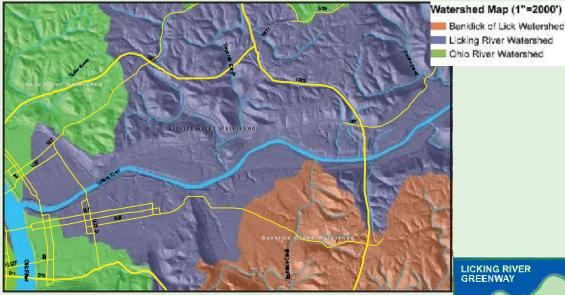
A watershed is a defined area of land that drains into a river system or other body of water, delineated by a boundary of high points (i.e., ridges). Water that falls on one side of a high point drains to a different location than water that falls on another. Watersheds are important to recognize, because an impact or change in one area of the watershed will affect the areas downstream in the watershed. Communities are connected by watersheds and natural features. Watersheds can be very large in fact, the Ohio River Watershed receives water from many states in the Midwest. Watersheds are naturally subdivided into sub-watersheds as each tributary stream branches off. Watersheds are described or named by the major stream that runs through it.

There are three main watersheds located within the study area. The Licking River Watershed is the primary and largest, followed by the Banklick Creek Watershed, which encompasses the area adjacent to the confluence of the Banklick Creek and the Licking River. Both drain to the Ohio River watershed, which is located along the northern boundary of the study area.

Covington Loop trail



Watershed





Where Northern Kentucky Together

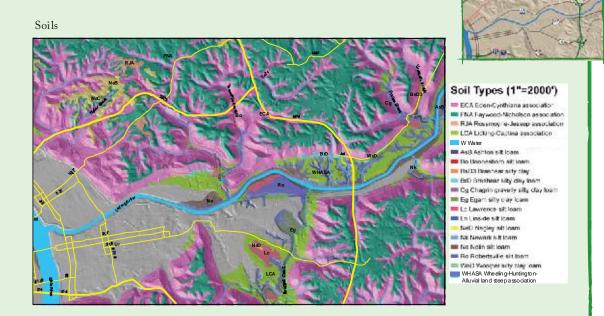
Eco Structure (continued)

Geology & Soils

Geology and soils are important factors in determining many of the physical attributes of an area, including the physical appearance of the environment, local flora, water quality and land use. The underlying geology has a major influence on landform, and rocks provide the parent material from which soils are created. The nature of the rock helps to determine not just the nature and chemistry of soil formed, but also the rate at which it forms. This in turn strongly affects the vegetation that will grow naturally and the type of agriculture or horticulture that can be sustained.

In regard to geology, the areas adjacent to the Licking River area are alluvium and glacial outwash. Alluvium contains a variety of materials, including fine particles like silt and clay and larger particles like sand and gravel, while glacial outwash contains sand and gravel-sized particles. Both areas provide opportunities for water infiltration, as the porous soil readily soaks up precipitation. The surrounding hillsides consist primarily of limestone and shale.

Four major soil types surround the banks of the Licking River. These types include Urban Land, Nolin Silt Loam, Alluvial Land, and Egam Silty Clay Loam. The largest portion is classified as Urban Land, which is soil that has been disturbed over time by development (e.g., compaction, erosion, impervious surfaces). Nolin Silt Loam is located mostly within the Licking River floodplain and is subject to flooding during winter and spring months. Alluvial Land consists of rather narrow, steep areas along the Licking River and Banklick Creek. Most of this land is in scrub brush, weeds, and trees. The potential for erosion is high in these areas. Egam Silty Clay Loam is on flood plains along both sides of Banklick Creek banks. There is little or no hazard of erosion on this soil.





Eco Structure (continued)

The Licking River Corridor

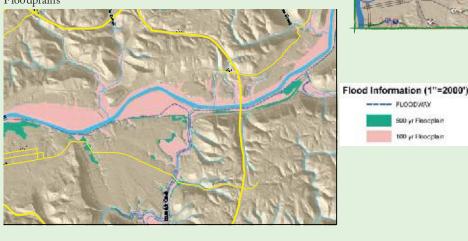
The Licking River Corridor varies along its course through Kentucky. Most stretches are lined with bands of vegetation, while others are flanked by steep hillsides and urban development. Despite the variability in land uses, the Licking River corridor provides valuable ecosystem services. Riparian areas offer habitat for a distinctive suite of local plant and animal species. The corridor also helps improve water quality by filtering suspended solids and recycling nutrients.

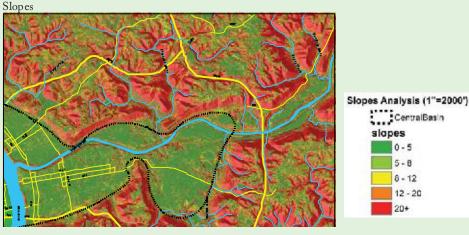
Also located along the banks of the Licking River is the floodplain. Floodplains are the flat bottom lands adjacent to river channels that accommodate floodwaters during high-precipitation or high-flow events. Although floodplains provide valuable ecosystem functions (e.g., storing sediment and improving soil quality), they pose significant risks to urban development.

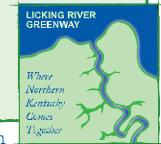
In addition, this Licking River Corridor is home to a variety of plant and animal life, including some threatened and endangered species. The preservation of this corridor will ensure the future stability of these species.







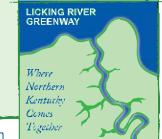


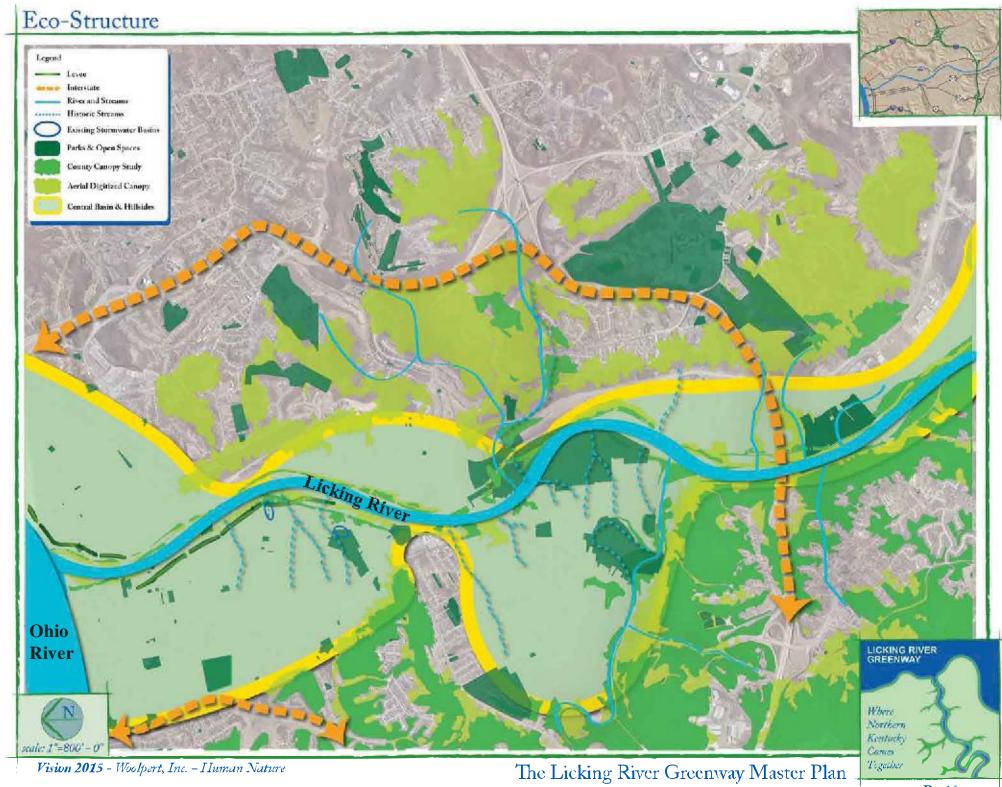


--- FLOODWAY

900 yr Flooddiaid

100 yr Floodplain





Infrastructure

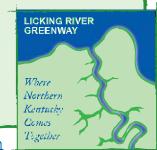
Land Use

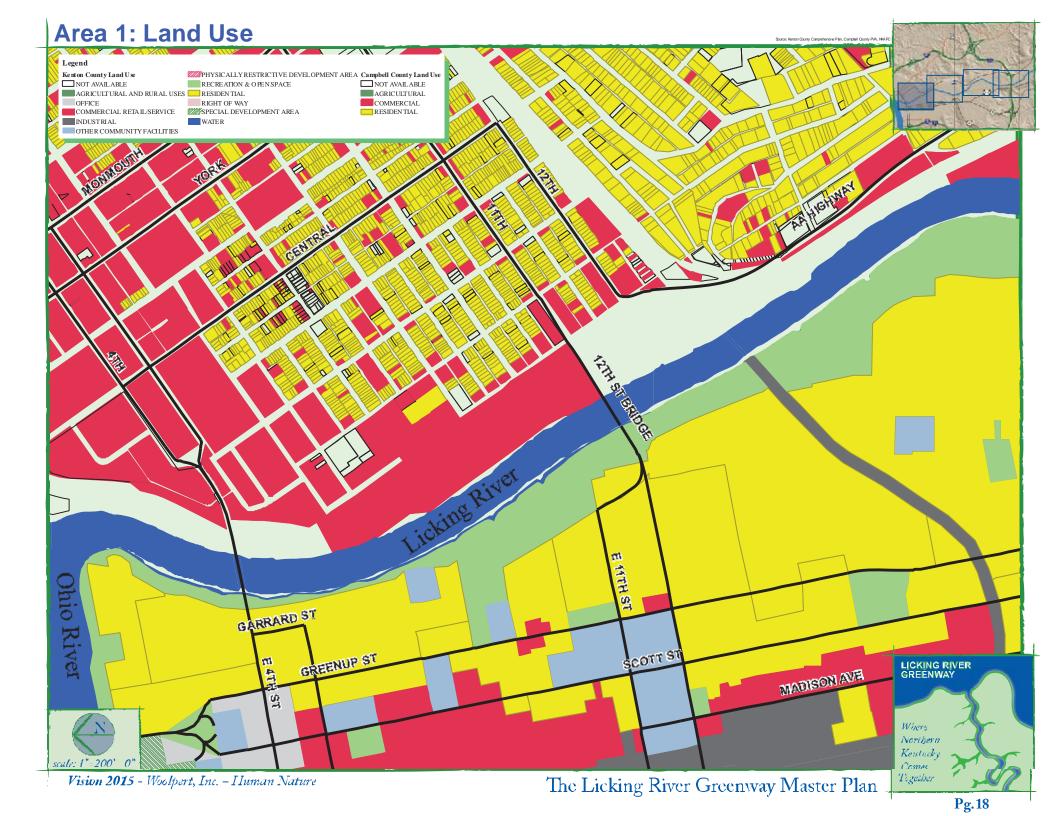
An important consideration in selecting alignments for the paths is the adjacent land use, including greenspaces found along the riverfront and adjoining communities. In general, residential land uses border the river in Kenton County, while industrial uses border the river in Campbell County. Several residential districts, located within close proximity to the riverfront can be enhanced through strong connections to the river.

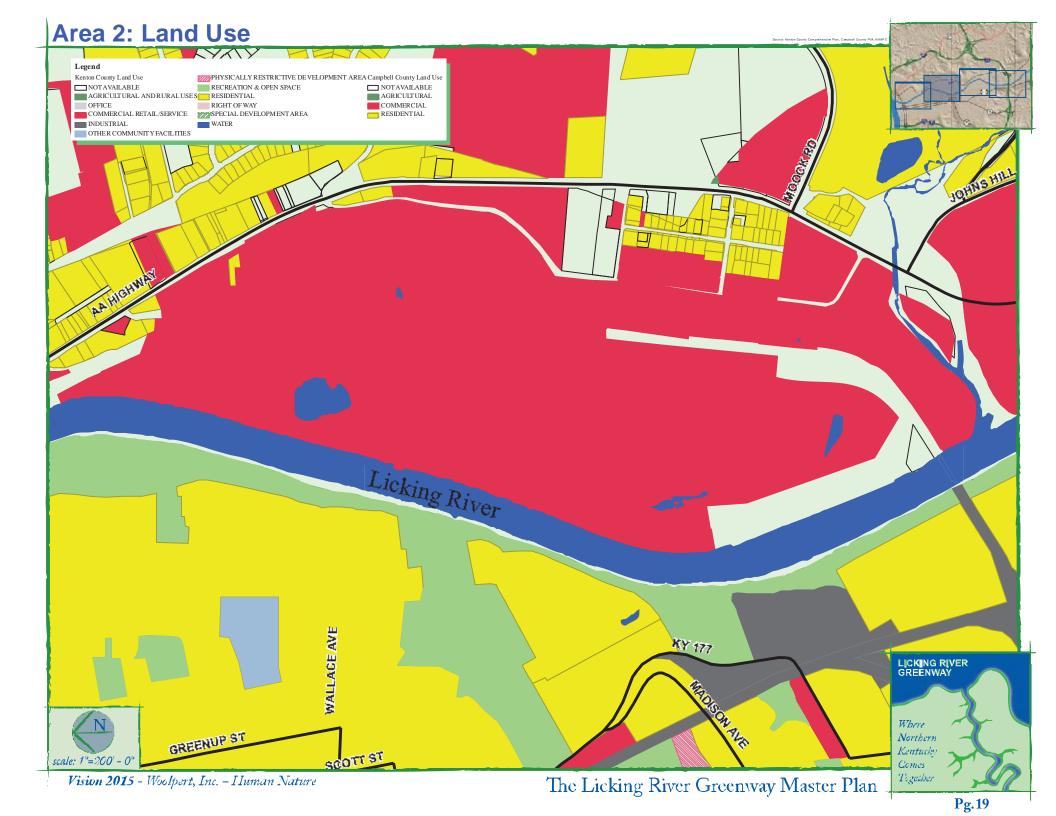
Transportation Network

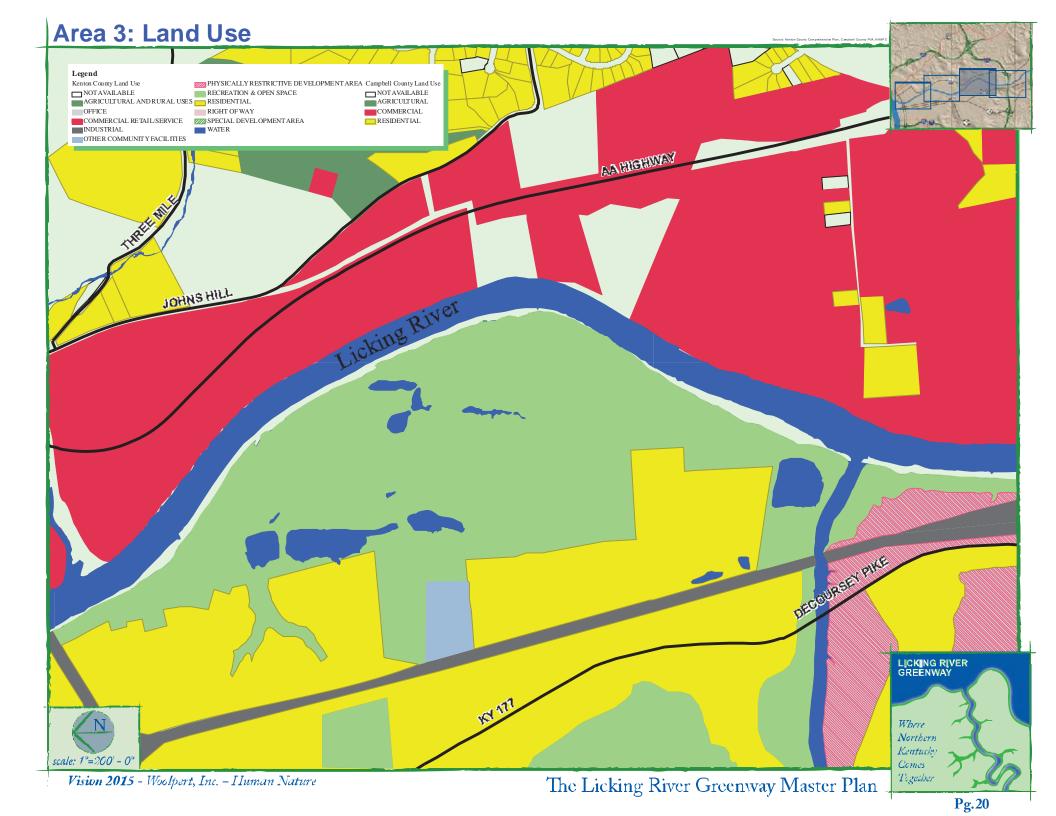
The greenway corridor is flanked by north-south road corridors, with limited crossing points (3) and limited east-west access to the river. Major roads that frame the study area are KY 9 (the AA Highway), KY 177, KY 16, KY 17, US 27, I-275 (no access), KY 8 (4th St), and 12th St. Crossing points on the Licking River occur at 4th Street (Rt. 8), 12th Street and I-275.

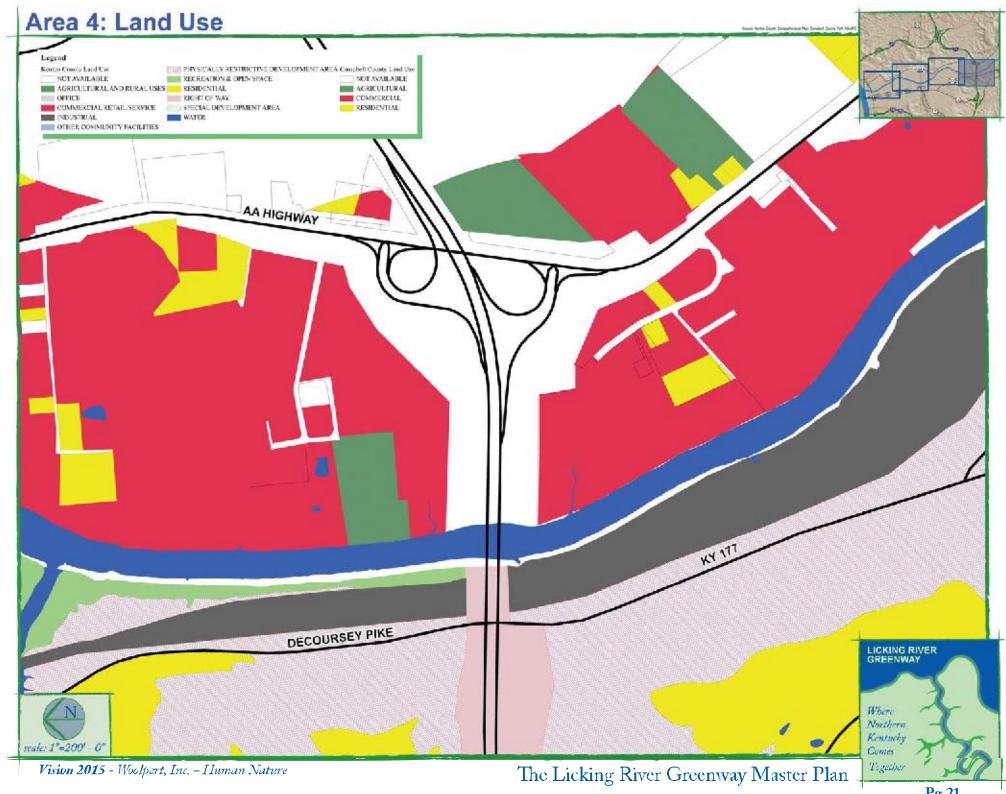












Infrastructure (continued)

Wet Utilities

Major sanitary/combined sewer trunklines traverse the study area as shown in the attached wet utilities maps. A sanitary sewer line runs parallel to the riverbank throughout most of the Kenton County side. Other major sanitary/combined sewer system features are the interceptors and Combined Sewer Overflows (CSO) located between the floodwall and the riverbank throughout the study area. The CSOs discharge into the Licking River during large rain events. A siphon structure in General James Taylor Park in Newport carries combined sewage across the mouth of the Licking River. In addition, sewer lines cross the river at 20th Street in Covington, just north of 33rd Street in Covington, and at the confluence of Banklick Creek and the Licking River.

Two flood pump stations, owned and operated by the Sanitation District No.1, are located behind the floodwall in Covington. As the river level rises during flood events, the combined sewer overflows become inactive and the flood pumps discharge sewage and storm water into the Licking River.

A few water lines extend across the river in the project area. According to data from the Northern Kentucky Area Planning Commission, water mains cross the Licking River at the railroad bridge just south of 12th Street and at another location south of Frederick's Landing. Water mains extend to the river to supply businesses at E 16th Street in Covington, to the abandoned water line bridge north of Frederick's Landing

(both sides of the river) and to the Kenton County Water District site just north of the confluence of Banklick Creek and the Licking River.

Northern Kentucky Sanitation District 1 (SD 1)

The Kentucky Environmental and Public Protection Cabinet, the U.S. Environmental Protection Agency, the U.S. Department of Justice and Northern Kentucky Sanitation District No. 1 recently reached a settlement to address sewer overflows and water quality in Northern Kentucky. The settlement, in the form of a consent decree, will allow SD 1 to take an innovative approach to address impacts of pollution sources on receiving waters.

SD1 will use a watershed approach to address sewer overflows. This process will identify water quality impairments, the sources of the impairments and their significance relative to the watershed. Then alternatives for mitigating the impairment will be evaluated and a plan developed for maximizing the watershed benefits received for the resources invested.

As a result of this consent decree, SD 1 may be seeking opportunities to separate combined storm and sanitary sewers in Northern Kentucky, and manage stormwater through green infrastructure such as bio-swales, wet ponds and slow release catch basins. Potential green infrastructure locations exist along the Licking River corridor, presenting an opportunity for SD 1 and local communities to partner for the development of portions of the Licking River Greenway & Trails.



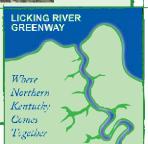
Pump station

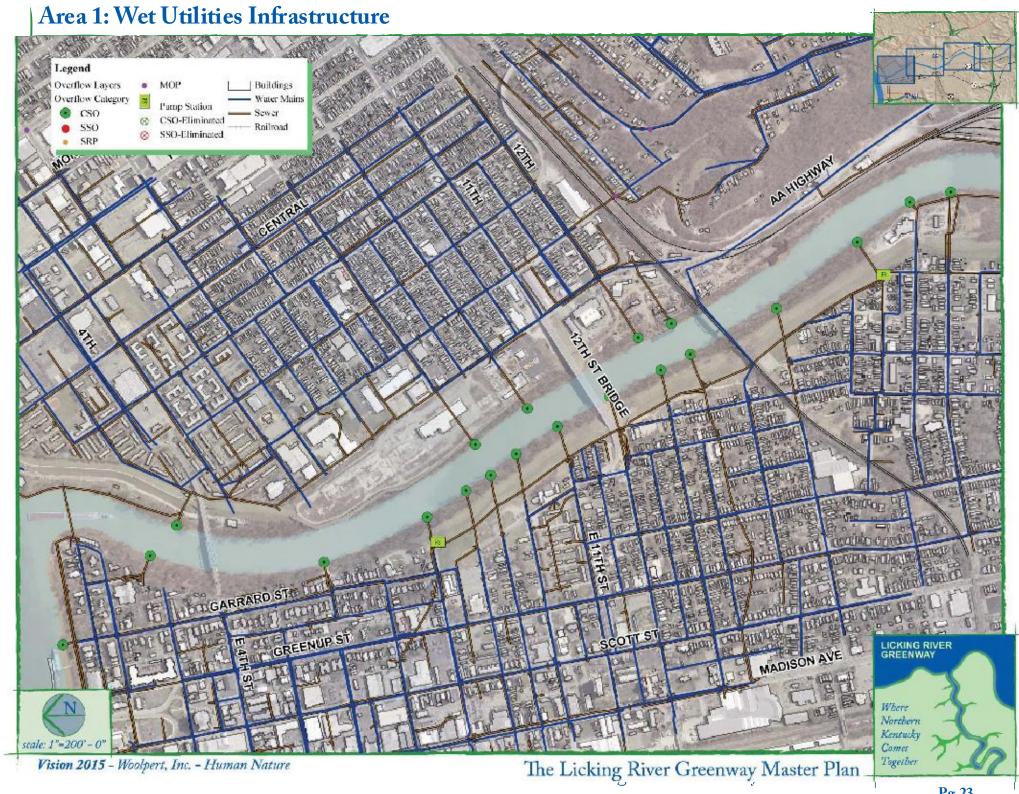


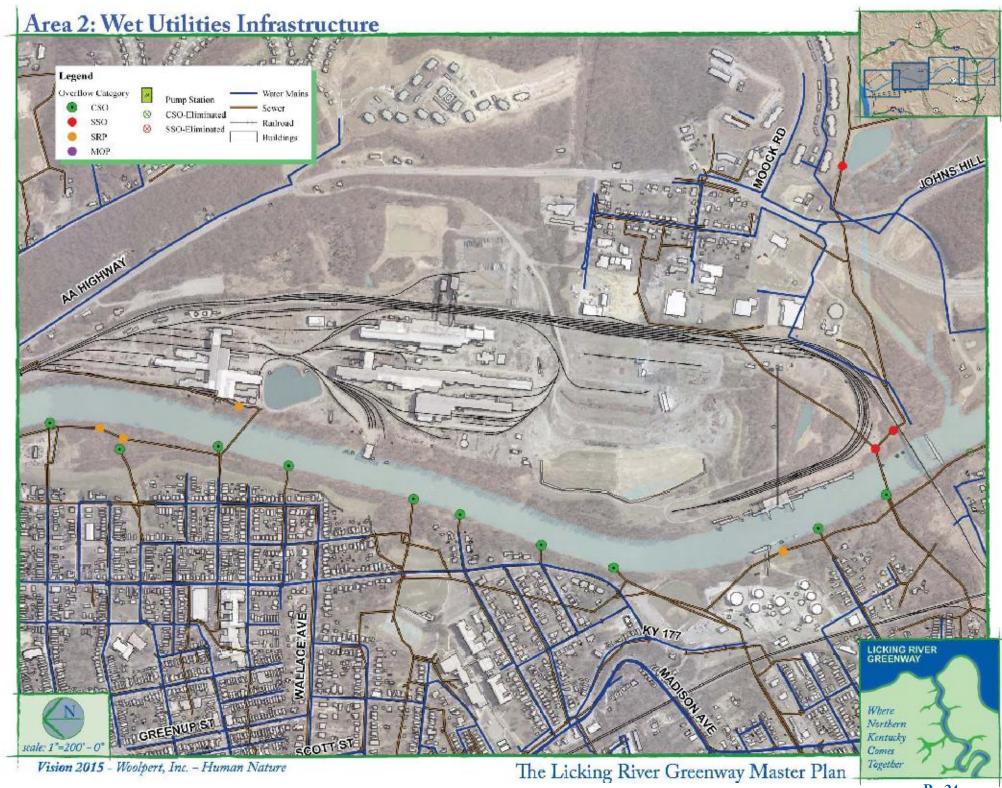
Combined sewer overflow structure

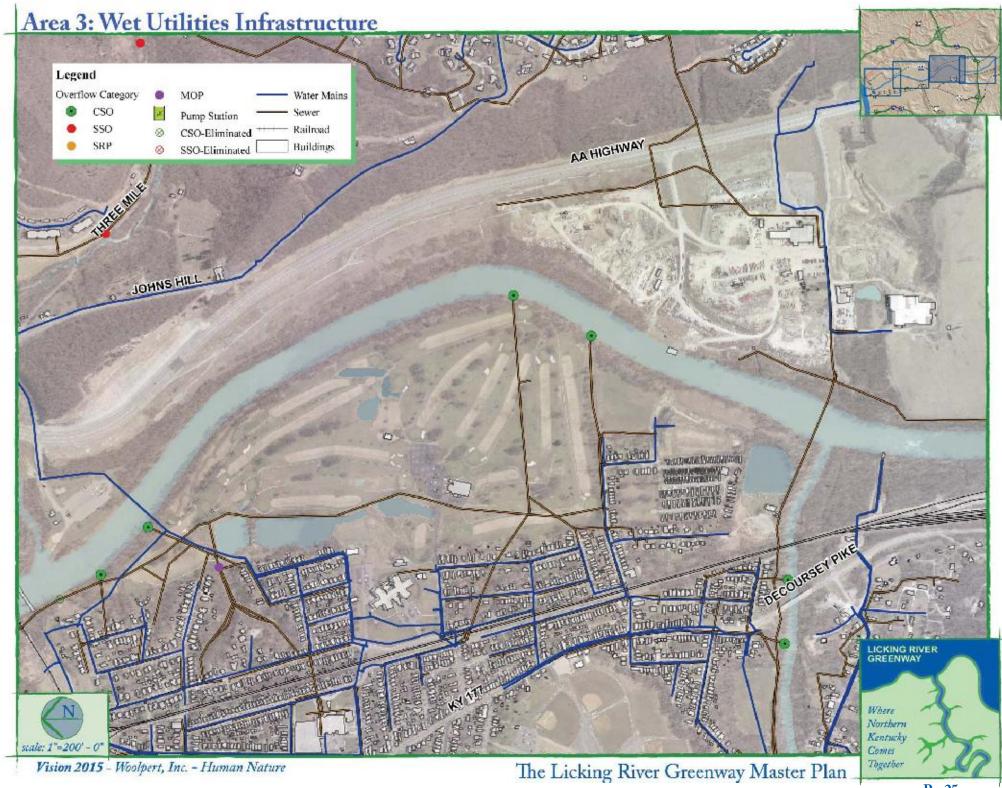


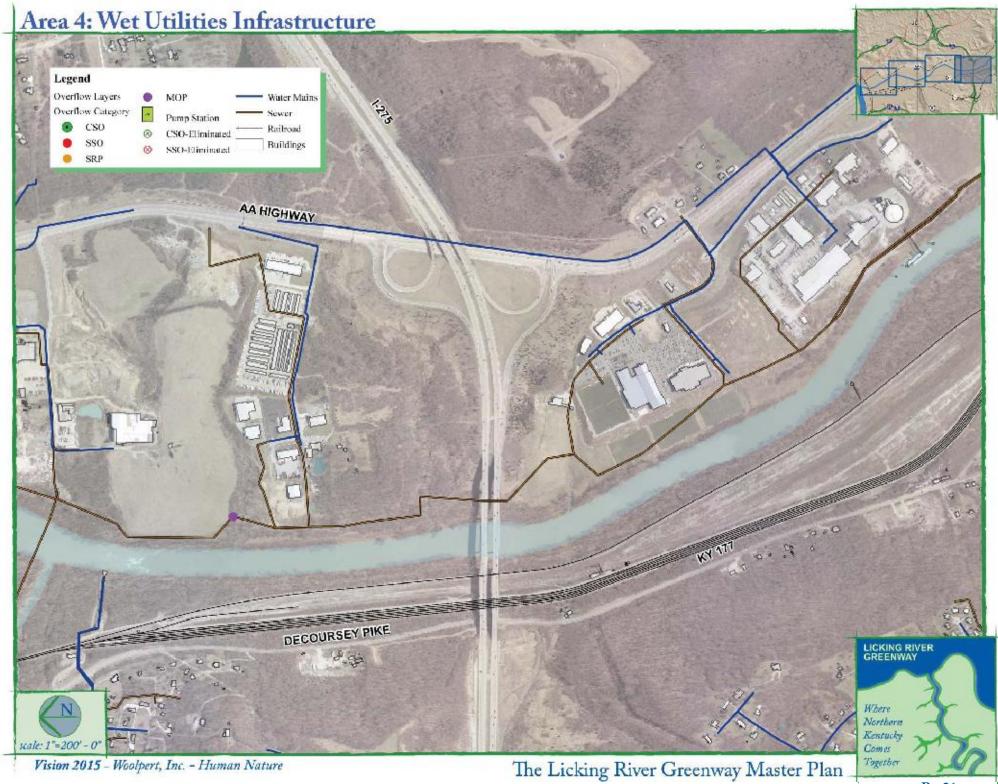
Sewer discharge point











Infrastructure (continued)

Overhead Utilities

Overhead utility lines are common in the study area. While some would present visual obstructions in the greenway, other utility corridors and accompanying easements warrant further exploration for their use as potential routes for trails and greenway alignments.



Flood Protection Systems and Floodplains

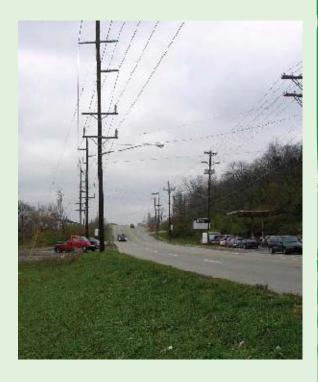
The floodplains in the study area vary from one community to another based on the existence and location of floodwalls and levees. These flood protection systems are shown on the attached maps. Levees and floodwalls can limit access to the river, but can also provide a continuous trail route at the top.

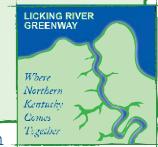
The City of Covington is protected by a floodwall or earthen levee along much of the Licking River. However, the Licking Riverside community chose to forgo the flood protection. Along the Licking River, flood protection is provided approximately between E. 8th Street and Wallace Avenue. Presently the only pedestrian or vehicular access point between the riverfront and the city street grid is at E. 16th Street.

The City of Newport is entirely protected by a combination of floodwalls and levees along the Ohio River and the Licking River. There are no existing access points through the levee/floodwall system for pedestrians or vehicles along the Licking River in Newport. However, there is access through the system along the Ohio River at Columbia Street.

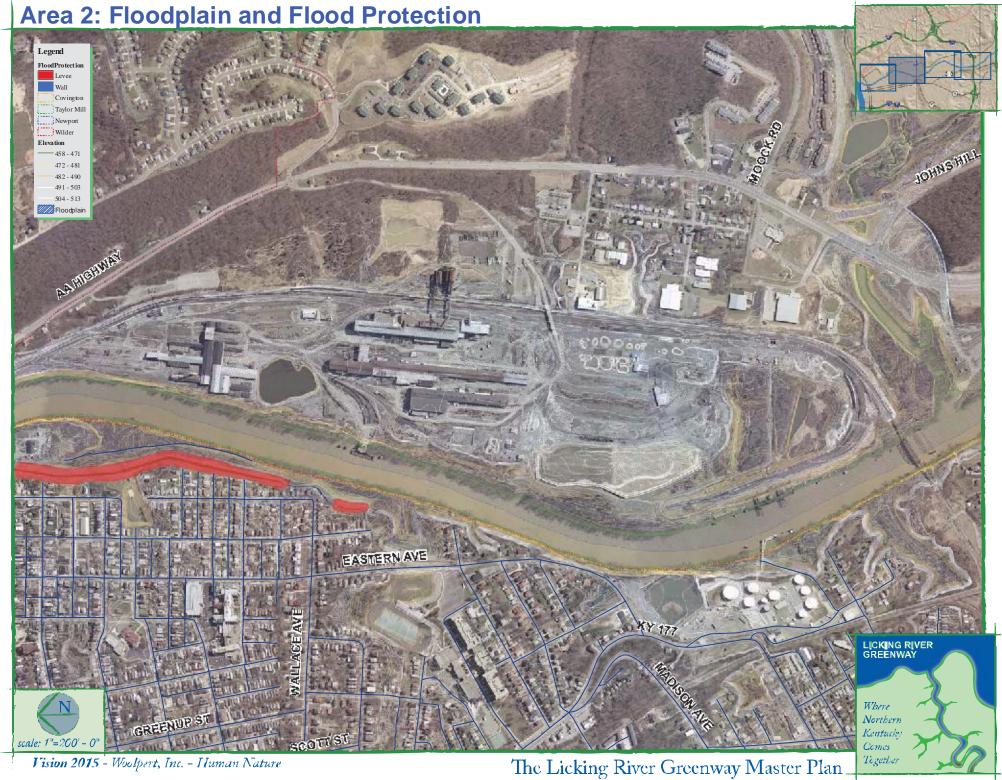
The cities of Taylor Mill and Wilder have no flood protection structures.











Opportunities

Opportunities identified include:

- Creating trails and riparian greenways that connect Northern Kentucky communities not only with one another, but also with regional open space systems
- Stimulating and guiding redevelopment in the Licking River valley, particularly within Campbell County
- Maximizing the scenic quality and recreational value of the Licking River valley with new facilities and enhancements
- Building upon the assets and infrastructure that currently exist.
- Integrating environmental and social objectives and creating a truly sustainable asset for future generations
- Integrating greenways and trails with the planned Ovation development in Newport
- Celebrating the unique cultural assets of the river corridor and adjacent communities



Rowing Team on the Licking River

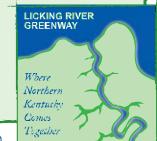
- Emphasizing the myriad points of interest that attract visitors to Northern Kentucky
- Rediscovering the former Wiggins Battery site as a potential historic attraction for a new park
- Improving the ecological health of the Licking River, its tributaries and riparian habitats by reducing combined sewer overflows (CSOs), improving the quality of stormwater runoff, and reducing erosion through bank stabilization
- Working in conjunction with Northern Kentucky Sanitation District #1's long-term efforts for reducing and removing combined sewer overflows
- Promoting forest preservation and tree restoration throughout the Licking River corridor
- Taking advantage of high-permeability areas (e.g., areas adjacent to historic streams and the Licking River) for implementing green infrastructure such as bio-infiltration basins.
- Enhancing open spaces within the floodplain to improve flood protection and provide additional recreational amenities

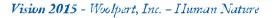


I-275 Overpass on the Licking River through Wilder



IPSCO- Formerly Newport Steel Site





Constraints

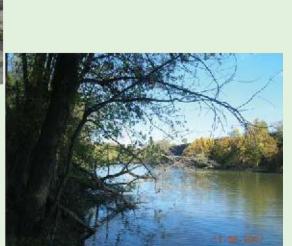
Constraints identified include:

- Physical obstacles and existing industrial properties, utility infrastructure and general riverbank/floodplain conditions may restrict access to and along portions of the river.
- The future land use of major industrial properties, specifically the former Newport Steel properties, is uncertain.
- The current location of River City Recycling could present a road block for full integration of a trail and greenway.
- The Maxim property between the AA Highway and the Licking River needs barge access; therefore, the trail near this property may require detailed design work.
- There is often a lack of cohesive regional cooperation, among both private and public entities.
- There is a lack of comprehensive and sustainable funding from local, state and federal sources.
- Flood barriers hinder connections between the riverfront and adjacent neighborhoods and communities.
- Historical streams have been modified over time with pipes and floodwalls that accompany development; this alters the natural infiltration of water into the soil.

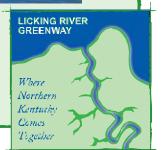
• In some areas, the underlying geology and soils are considered to be unstable, as the active movement of slopes is not uncommon; therefore, development in these areas may be limited.

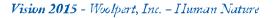


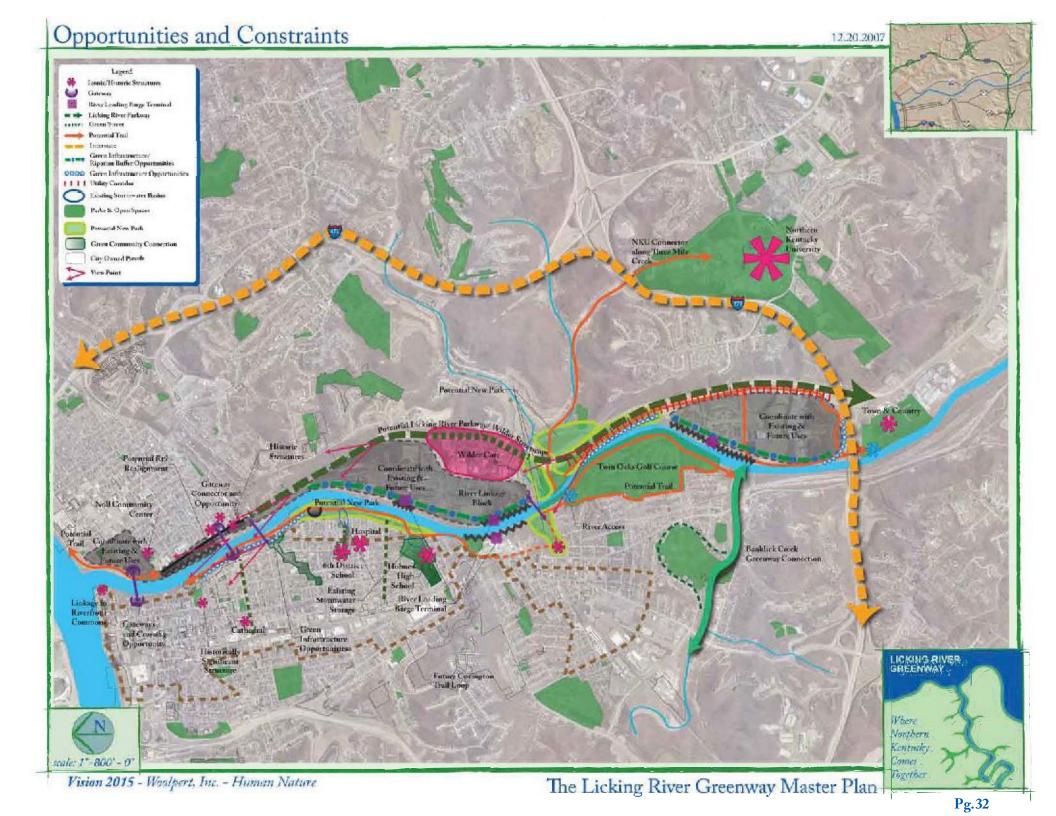
Flood levee opening in Covington



View of Licking River from Covington's Bank







Development of a Long-Range Plan

Based on the Opportunities and Constraints of the potential greenway corridor, the design team, under the guidance of the Steering Committee, developed alternative alignments for the trail & greenway network. Through some sections of the corridor, there are several alternatives for trail alignments. However, some of the more difficult sections to traverse offer only one option.

A team of volunteers was formed to engage the community to gain input on the various trail alignments and support for the project. The civic engagement team presented the trail & greenway alternatives and solicited input from approximately 50 civic groups, land owners and government entities. The efforts of this group shaped the plan and led to refinement of the alternatives into a Long Range Trail & Greenway Master Plan.

The Long Range Trail & Greenway Master Plan represents the long-term vision for a braided trail network and riverfront greenway system along both the Kenton and Campbell county sides of the Licking River. Some sections of this system are not easily accomplished, given current land use along the river and other existing constraints. These sections of the trail are shown by a yellow or red dashed line on the Long-Range plans. However, other sections of the plan are more easily accomplished. These sections have been labeled the "Initial Route" and are shown in solid red on the Long-Range plan. In addition, these sections comprise the Initial Implementation Plan.

The study area has been illustrated in four segments to allow a detailed look at the greenway. Each section and potential trail alternative is described in this chapter, and shown on the four maps labeled Area 1 through Area 4.

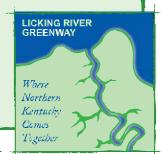




Garrard St. in Covington



Randolph Park



Interpretive Stops

Cultural/Historical Interpretive Stops

As described in Chapter 2, many points of interest occur along the greenway that reflect the historic, cultural and natural heritage of Northern Kentucky and the Licking River valley. These elements will be indicated through a series of Interpretive Stops, featuring special signage to tell the story of the importance of each element along the trail. Each interpretive stop, marked and numbered on the trail maps, is described in the following text.

1. Covington Public Landing

An historic feature of the Covington Riverfront, that served as a stopping point for riverboat traffic, the Covington Public Landing offers residents and visitors access to the Ohio River and amenities in Cincinnati.

2. The Point / Licking Riverside

The Point at the confluence of the Licking River with the Ohio offers unmatched views of downtown Cincinnati and showcases the lifeblood of the entire region's two rivers. The surrounding area, the Riverside Drive Historic District, contains an impressive collection of early-nineteenth century homes and is part of the National Register of Historic Places.

3.4th Street Bridge

The 4th Street Bridge is not only a vital connection between cultural hot-spots in Covington and Newport, but also an important trail link between both shores of the Licking River. The bridge is in the planning stages of being rebuilt. It will be important that the redesigned bridge accommodate walkers and cyclists.

4. Lincoln Grant Building

Formally known as the Lincoln Grant School, this building was constructed in 1931 and provided public education for African-American students in Northern Kentucky. More recently, it served as a community center.

5. Newport Steel - Headquarter

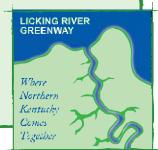
This site was the headquarters of Newport Steel, one of the largest steel and iron manufacturing centers south of the Ohio River. The company dates back to the mid-1800s, when it was known as the Swift Iron & Steel Company. Although most of the manufacturing plant is located south on the Licking River in the City of Wilder, the Newport site house the corporate office for the local IPSCO. The former Newport manufacturing plant at this site is no longer in use and may be available for future redevelopment.



Covington Landing



4th Street Bridge



Interpretive Stops (continued)

6. Old Covington - Industrial

Historic industries along the Licking River Corridor included: Licking Iron Works, the J. Droege & Co. Iron Foundry and the Covington Gas Light Company. There also were a number of distilleries including Dorsel & Wolftaney Distillery.

7. 6th District School/St. Elizabeth Hospital

The Sixth District School has been a cornerstone of the community and remains a center of pride and community participation. St. Elizabeth Hospital was the first hospital in Northern Kentucky, established in Covington in 1861 and has been located at its current site since 1911. St Elizabeth pioneered many innovative early efforts including, laboratories, autopsies and x ray equipment.

8. Newport Steel - Operation

With centralized sheet mills and blast furnaces, the Operations Center of the Newport Steel Company once employed thousands of workers. At its peak, Newport Steel was a major employment center for the region. The 200-acre site has been a major transportation hub for the industry where raw materials and finished products are shipped freely by barge and rail.

While steel is no longer manufactured on site, there continues to be an active tubular steel welding and fabrication operation.

The company also uses the site for storage and redistribution of tubular steel to customers with river and rail access.

9. Holmes High School

Holmes is one of Kentucky's earliest taxsupported, coeducational, public high schools. Founded as Covington High School in 1853, at Scott and 11th Sts., its present name was adopted when the school moved to the current site. The campus is the former estate of New Orleans merchant, Daniel Henry Holmes, and was also the site of Union Army activity during the Civil War. Today the Holmes High School campus is an icon in the community and provides open space to the neighborhood. Because its student population draws from the surrounding neighborhoods, a bikeway connection to campus could promote riding to school and alleviate early morning traffic congestion.

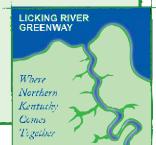




Latonia Railroad Depot



Holmes High School



Greenway & Trail Development Plan

Interpretive Stops (continued)

11. Larz Anderson Civil War Battery

The Larz Anderson Civil War Battery was built in the summer of 1862, following the Confederate invasion of Kentucky. Overlooking the bend of Independence Pike and the Licking River Pontoon Bridge, this Battery was named after a prominent Cincinnati businessman. It was one of many batteries that formed a ring in Northern Kentucky to defend Cincinnati.

12. Latonia Railroad Depot

The Latonia Railroad Depot provided an important southern passenger and freight link for Cincinnati's larger Union Terminal. Several major rail lines connected Cincinnati and Northern Kentucky with Louisville, Lexington and Nashville.

The "wye" as it is known, crossed the Licking River into Wilder and connected to Newport.

13. Frederick's Landing - Wilder

Located along the Licking River in Campbell County, Wilder was once known as Leitch's Station, named after David Leitch from Scotland. Leitch, who owned 35,000 acres of land, started selling the land in 100-acre tracts around 1789 to anyone who wanted to move near his settlement along the Licking River. The name Wilder dates back to a railroad station built in the mid-1800's for the Louisville, Cincinnati, and Lexington railway named Wilder station.

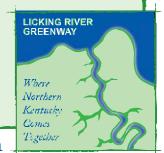
"Wilder Station" is now located on property owned by Newport Steel. In 1967 a public boat ramp was also built in Wilder by the Army Corps. of Engineers, but the county operated marina was closed in 1981. The city reopened it as "Frederick's Landing" in 1984 and operates it as a city park. This stop offers both passive and active recreational opportunities, including a playground, picnic areas, and a bird trail. The site is also the only public boat launch on this section of the Licking River.

14. Wiggins Civil War Battery

This Civil War site was named after Samuel Wiggins, a financier who built Cincinnati's Wiggins Block on Fountain Square. Similar to the Larz Anderson Battery, Wiggins Battery was built to protect Cincinnati from an impending Confederate invasion. This very prominent site on top of St John Hill, provided a commanding view of the Licking River Valley. This remaining 30 acre site could be developed into an interpretive site to provide the perspective of the civil war era.



Frederick's Landing



Greenway & Trail Development Plan

Interpretive Stops (continued)

Natural/Ecological Interpretive Stops

1. Confluence of Two Rivers

This site, where the Ohio and Licking Rivers meet, is the point at which a significant portion of Kentucky's watersheds join the Ohio River Basin. The Licking River is navigable by barge traffic and barges are often seen making the turn into the Licking from the point.

2. Floodwall Levee

Earthen levees along the western shores of the Licking River provide downtown Covington and the surrounding neighborhoods with valuable flood protection. The Riverside District along the Licking River chose to forego levee protection. The earthen flood protection levees start at 8th Street and extend south to Holmes High School where the natural grade rises above the flood elevation.

3. Green Infrastructure

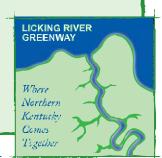
Before these neighborhoods were developed, many natural streams and creeks flowed directly into the Licking River. As Covington grew, natural drainage areas were filled and piped, and impervious pavement was expanded. Storm water no longer percolated into the ground but ran off to the sewer system which quickly exceeded capacity. With Green Infrastructure, some natural system functions can be restored and areas created that can alleviate pressure on the sewer system by infiltrating storm water through the soil. These areas can be incorporated as part of the Licking River Greenway to serve as open spaces for the neighborhood.

4. Habitat Restoration at River Bottom / New Park

Significantareasalong the Licking Riverthat are currently in public ownership represent opportunities for new park and open space. In Covington approximately 35 acres exist between the river bank and the earthen levee. This floodplain with native vegetation is currently in city ownership and presents an opportunity to preserve the floodplain and vegetation and also open the area to more public access and use. Limited vehicular access could be provided which will also encourage day use and further increase the activity and sense of security.



Confluence of the Ohio River and the Licking River



Greenway & Trail Development Plan

Interpretive Stops (continued)

5. Riparian Edge Preserve

Beginning at Frederick's Landing in Wilder, south between Route 9 and the Licking River approximately 43 acres exist in state highway right-of-way. The property was acquired to assure the stabilization of Route 9. Approximately one third of the property is in riparian vegetation. This area offers an opportunity to manage the riparian forest and expand and enhance native vegetation while providing pedestrian access along this stretch with hiking loops through the forest.

6. Banklick Creek Oxbow

This stretch of Banklick Creek reveals the stream's previous meanders. When such a loop meander is cut off or shortened by the action of water, the resulting isolated floodplain and "bow" type water course is called an oxbow. A large, former oxbow of the Banklick Creek is now the site of the Cappel Sports Complex.

7. Banklick Creek Confluence

Banklick Creek meets the Licking River at this point. Because the Licking River level was raised by the construction of the dams on the Ohio River, the Licking River backs up into this section of the Banklick Creek for some distance before the elevation of the creek is high enough to "flow" downstream to the Licking River. It is at this confluence point that the water trail can be accessed and paddlers can proceed up Banklick Creek in this back water condition.

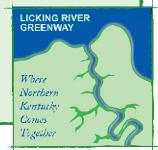
8. Natural Systems / Green Infrastructure

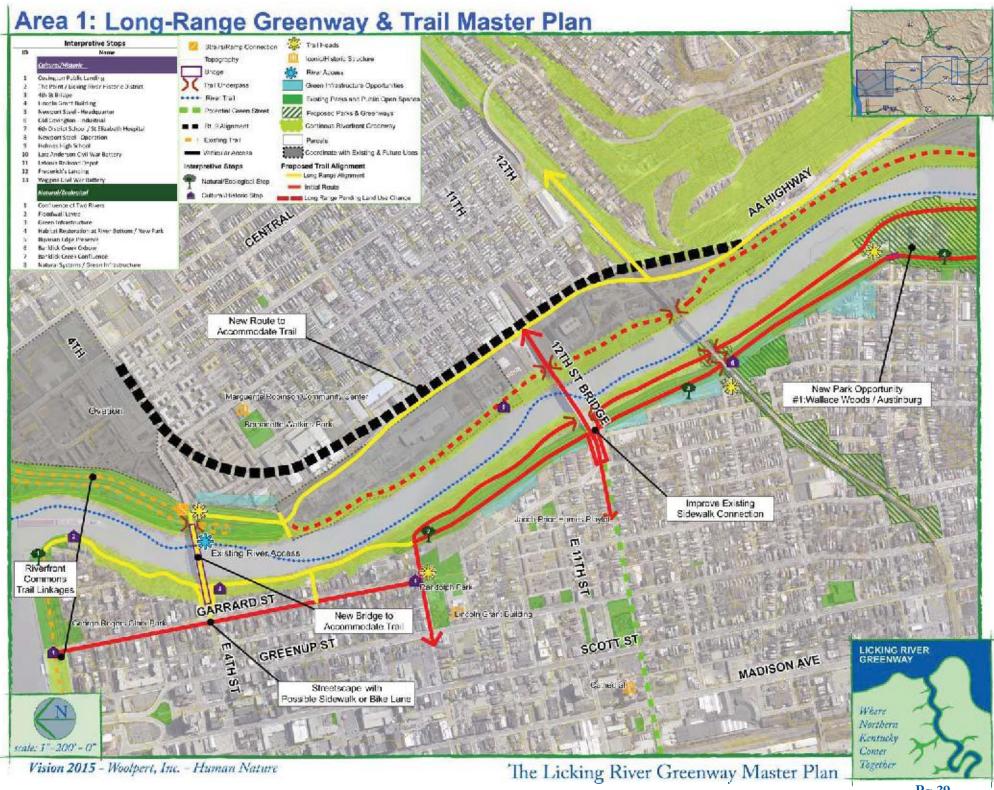
Remnants of natural drainage ways and floodplain occur in the area adjacent to the I-275 interchange. Preserving this as a natural system and open space could continue the benefits of natural storm water and flood water storage and cleansing before it reaches the Licking River.

While pressure to fill in these areas should be resisted, if development occurs adjacent to these areas, Best Management Practices (BMP's) should be incorporated to decrease the adverse impacts to these natural systems.



Confluence of the Banklick Creek and the Licking River





Area 1 Features - Kenton County - Covington

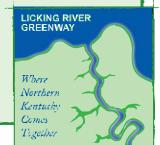
- Connect Licking River Greenway to Riverfront Commons in Newport and Covington along the Licking River south of the 4th Street Bridge.
- Under the Fourth Street Bridge there is a natural bench that could be used to traverse south under the bridge.
- Steep slopes make a riverfront route on the west (Covington) side difficult from approximately 5th Street to Randolph Park, This is a long-term route challenge.
- An initial route through this area would be to slightly modify Garrard St. with a widened pedestrian path.
- Randolph Park, a City of Covington park, located at the eastern end of 18th Street, is a wonderful community open space, and could serve as a potential trailhead.
- Randolph Park marks the beginning of the flood levee system in Covington. The levee provides an opportunity for a trail along the top of the levee that offers commanding views of the Covington and Cincinnati skylines as well as views back into Covington neighborhoods.
- Along the river bank, a floodplain bench presents a second trail route.
 Currently, this bench is heavily vegetated, offering a different perspective for the greenway user and also habitat for wildlife.
- A break in the levee at 12th Street presents challenges for the proposed top-of-levee trail. This trail would need to return to the bench below the bridge on the east side of the levee or go around the bridge on the west side of the levee and cross 12th Street.
- The 12th Street bridge is fairly new and offers a pedestrian and bicycle connection across the Licking River between Newport and Covington.







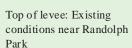
Ball Field at E. 15th St.



Area 1 Features - Kenton County - Covington (continued)

- This levee opening at 12th Street also offers a point of connection from the Greenway back into the adjacent neighborhood.
- A railroad bridge crosses just over the levy near 15th Street. Here again, the top-of-levee trail would descend to the bench and then return up the levy to connect south while the lower trail would remain below the bridge.
- The rail corridor right-of-way that runs through Covington, offers an
 opportunity for open triangular parcels to be knitted together to make a
 connection from neighborhoods into the Greenway and river trail.
- * The open space, Austinberg Neighborhood Park will be connected to the Greenway and offers another trailhead opportunity in Covington.
- Continuing along the river side of the levee, an existing bench creates a nice space for a trail. This would be at a high flood frequency, which might not hurt the trail structurally but it would mean additional maintenance for this trail location.
- At East 16th Street in Covington, buildings or industries occupy land on the river side of the levy. At this location, a gate through the earthen levy provides an opportunity to gain pedestrian and vehicular access to the riverfront. Rizzo Brothers Paint, an abandoned pallet company, and a Sanitation District pump station are located on the inside of the levee.
- * The building site inside the levee connects to a large wooded area that presents a great new riverfront park opportunity for the Austinburg and Wallace Woods Neighborhoods with potential for vehicular access, parking or trail staging areas.



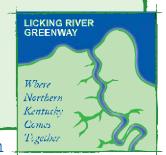




Rendering: Proposed top-of-levee trail



Toe of levee near 12th St.



Area 1 - Campbell County - Newport/Wilder

- Taylor Park, at the confluence of the Licking River and the Ohio River in Newport is a great asset that will tie into the proposed Greenway.
- * The Fourth Street bridge should be rebuilt to accommodate a pedestrian trail across the Licking River.
- Currently, there is access to the river for paddle boats underneath the 4th Street Bridge that the rowing center currently uses.
- South of the 4th Street Bridge, there are some gray zones, or under utilized industrial properties that could be ripe for redevelopment.
- A levy along the river is lined by sheet pile on both the riverside and the property side. It is a barrier between any potential trail and the River. Should this levee be rebuilt with a new development, it should be built to accommodate a trail.
- A parallel route through this industrial area is an alignment along Route
 9. Route 9 is slated to be rebuilt with the extension of the AA Highway into Newport. A multi-purpose trail should be developed alongside the new highway through the Licking River valley.
- Any trail alignment through this area should provide a connection to the 12th Street Bridge, connecting across the Licking River to Kenton County. It is likely the new AA highway extension will provide an interchange at the 12th Street Bridge.
- In addition, an active rail line parallels the river through this area; it should be avoided as much as possible. Crossing of the rail line with the trail should be limited and well designed. Ideally, the trail should cross over or under the rail line, via a grade separated crossing.
- Currently, an active barge docking facility on the Newport Steel site is an impediment to a riverfront alignment through that site. Should that site be redeveloped for another use, a riverfront alignment should be considered as a part of that redevelopment.

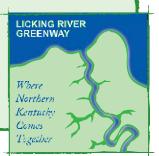


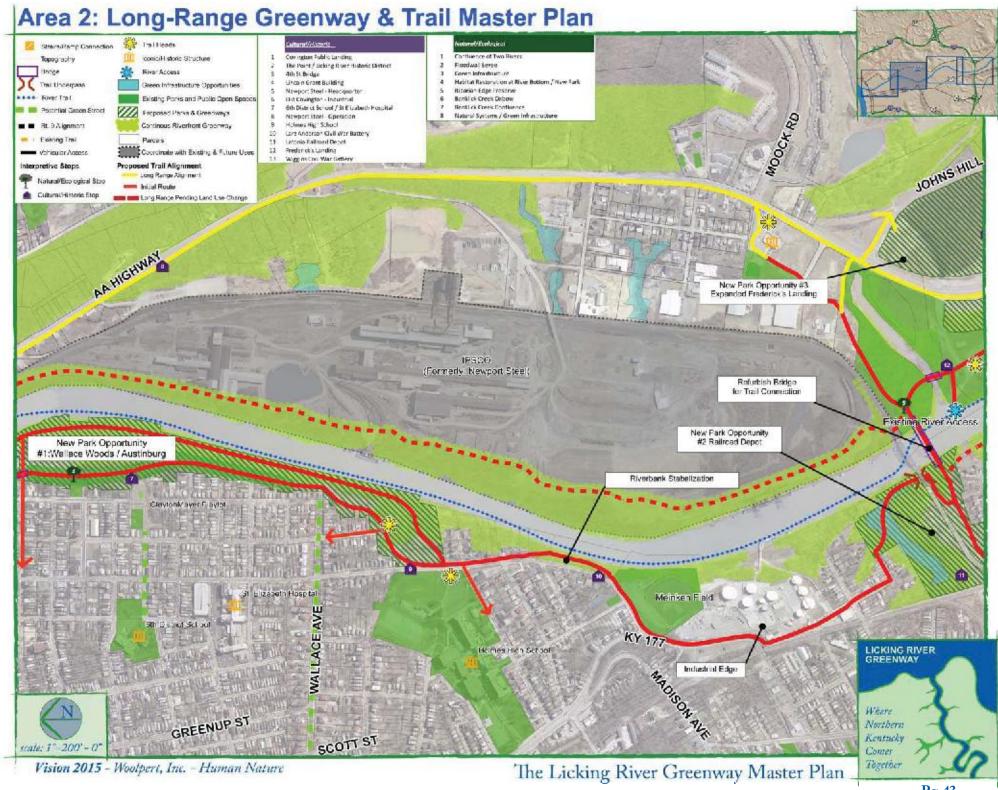
Water access point under 4th St. Bridge in Newport



Abandoned industrial property south of 4th St. Bridge







Area 2 Features - Kenton County - Covington

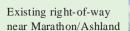
- At Holmes High School, another great open space fronts the river
 just opposite the school. This space, affectionately called the "bowl", is
 where the earthen levee forms an outdoor amphitheater used for certain
 outdoor community functions. This area is another potential park space
 that could be linked into the trail.
- * The levee walls end at Oakland Avenue north of Holmes High School.
- Significant erosion is occurring along the river at Meinken Field, a
 public ball field south of Holmes High School. This area has steep
 and highly unstable banks, making a riverfront trail difficult. However,
 bank stabilization measures could be designed to support a trail. From
 this point and south of Marathon, an on-street alternative should be
 explored.
- The Marathon site has an active barge terminal and a large amount of truck traffic. In addition, security issues restrict a trail alignment through this property. Some additional right-of-way along the street and sidewalk around the property could accommodate a trail.
- A trail alignment along the river can be accommodated south of Marathon along existing green space.



Existing riverfront path near Holmes High School

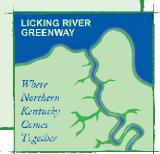


Rendering: Proposed trail





Rendering: Proposed path near Marathon/Ashland



Area 2 Features - Campbell County - Newport/Wilder

- * The IPSCO (formerly Newport Steel) Site covers the majority of Wilder riverfront property through this portion of the study area. Due to its industrial nature and active barge facilities, a riverfront trail alignment through this property is not likely. However, if this property is eventually redeveloped; a riverfront trail could be incorporated in the plans.
- * The best route through this area is an alignment along Route 9, slated to be rebuilt with the extension of the AA Highway into Newport. A multi-purpose trail should be developed to parallel the new highway through the Licking River valley.
- * The first opportunity south of the IPSCO site for the Route 9 trail to descend back to the river is at the Wilder City Building. The City has built a new park behind its building and owns right-of-way that can accommodate a path to the river just north of Three Mile Creek.
- * Three Mile Creek offers an opportunity to potentially connect a trail all the way to Northern Kentucky University along the corridor that leads up to Highland Heights.
- * Frederick's Landing, just south of Three Mile Creek, is a City of Wilder park with access to the river. However, because this park is not connected to the property north of Three Mile Creek, a pedestrian bridge could be constructed to cross the creek and expand the park.
- Frederick's Landing has the only boat launching ramp along the Licking River between I-275 and the Ohio River. This ramp is heavily used in the summertime, and will become an important facility for the entire corridor.

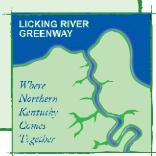


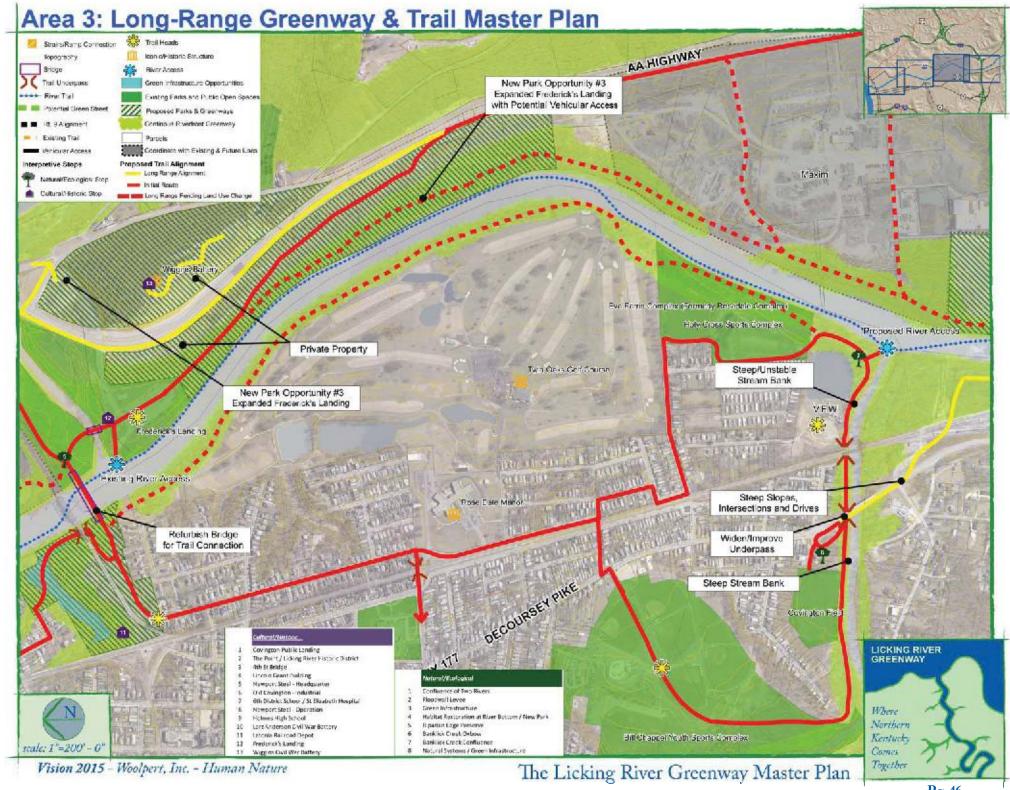
IPSCO (formerly Newport Steel) site on Licking River in Wilder



Community park behind Wilder City Building

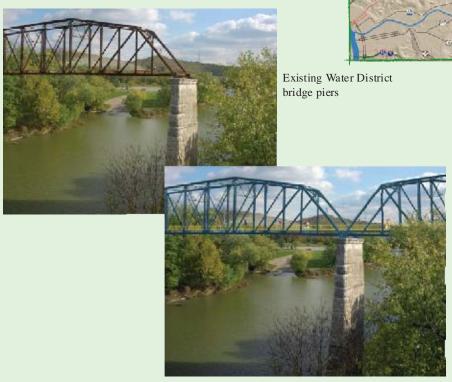






Area 3 Features - Kenton County - Covington

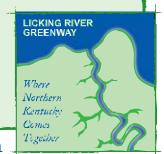
- * The old Latonia Depot is a green space just across the river from Frederick's Landing. This space still has an active rail line and rail bridge crossing the River. Because much of the old depot land is unused, it presents an opportunity for a new riverfront park in Latonia.
- Just south of the old depot property, private lots on top of the hill extend all the way to the riverbank, impeding a potential riverfront trail alignment through this area. In addition, slopes are very steep near the river.
- An abandoned water main bridge can provide a large part of the structure necessary to support a multi-purpose trail across the river connecting the Latonia Depot site with Frederick's Landing.
- Twin Oaks Golf Course and the Holy Cross Sports Complex present additional difficult trail alignment sections, due to limited land between the river and the developed facilities, as well as to steep topography. A riverfront trail through these properties may become possible with a change in use.
- * The initial trail alignment through Latonia is through the neighborhood along the railroad corridor and existing streets. Connections will link the Chappel Sports Complex and Covington Field, and green space along Banklick Creek.
- * The VFW property presents a potential river access point near the confluence of the Banklick Creek and the Licking River.



Rendering: Proposed pedestrian bridge using existing piers



Railroad bridge underpass accessing VFW property



Area 3 Features - Campbell County - Newport/Wilder

- Most of the unused green space south of Frederick's Landing is Kentucky Transportation Cabinet property. However, there is a sliver of land between Frederick's Landing and Kentucky Transportation Cabinet land which crosses Route 9 and extends to the top of John's Hill that is Newport Steel property and the site of the Civil War era Wiggins Battery. The City of Wilder would like to acquire this land for a trail connection from Frederick's Landing to the Kentucky Transportation Cabinet property. Thus connecting Frederick's Landing to Route 9.
- * The Licking River Parkway (Route 9) provides great views of the river and the region. A route along this road is the likely initial route, given the industrial uses along the river.
- * The Maxim Crane site is a huge parcel for equipment storage with a barge facility. A trail along the river through this property should be considered if this area redevelops. However, AA Highway is the likely initial route because of the existing right-of-way.

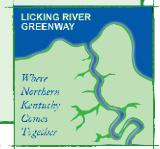


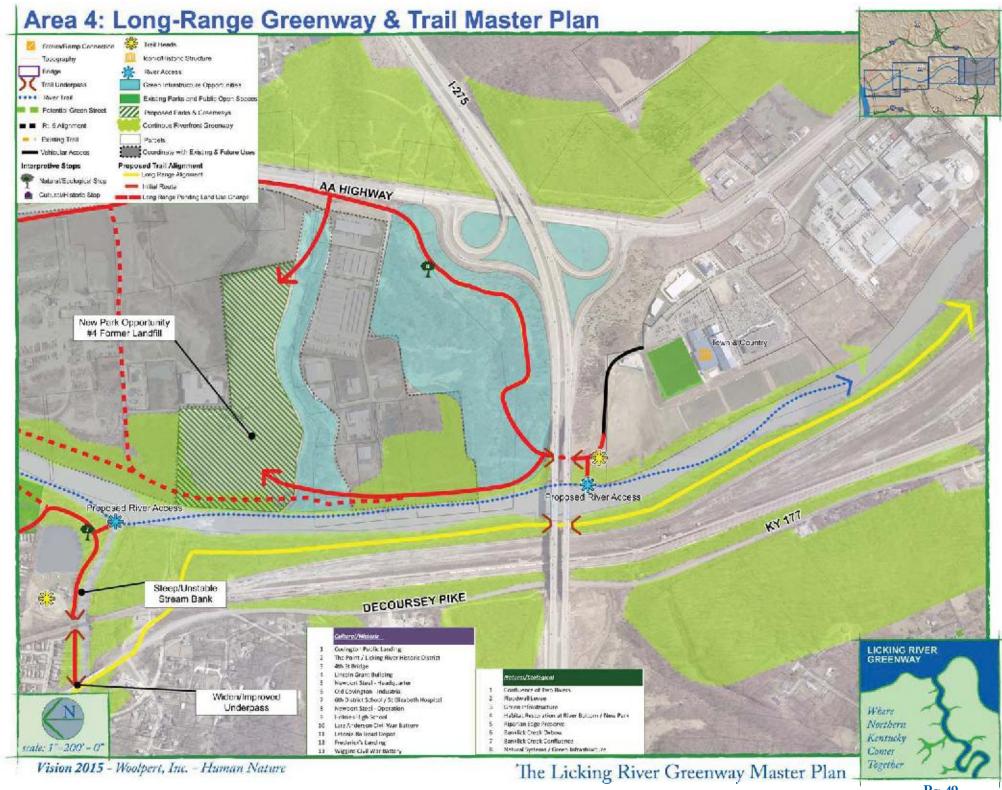
Existing access point at Frederick's Landing



View south on Route 9 near Maxim







Area 4 Features - Kenton County - Covington/Taylor Mill

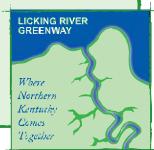
- Just south of the Banklick Creek confluence is the Decoursey Pike corridor, a long stretch of difficult terrain with limited right-of-way. A trail long this road corridor would be cost prohibitive at this time.
- * The land east of Decoursey Pike is owned by CSX Railroad and is an active rail yard.
- * The Water District has an intake and some facilities near Banklick Creek, with access through the rail yard and across the tracks. It may be possible to negotiate a trail alignment across the railroad at that point, allowing access to the riverside. A riverside trail south of the Banklick Creek is the most likely option.



Decoursey Pike bridge over Banklick Creek



Confluence of Banklick Creek and Licking River



Area 4 Features - Campbell County - Mason/Wilder

- * The old capped Newport landfill site, is an open space resource that could be used as a passive park. A connection to this potential park can be made from the trail.
- As in area 3, a riverside trail may be possible through this area if land uses change, however an alignment along Route 9 is the likely initial route.
- South of the landfill site, most of the proposed corridor consists of I-275 right-of-way. At this point, the trail will follow the toe of the slope and continue under the I-275 Bridge to connect to Town and Country Sports Complex. Town & Country consequently, will serve as the southernmost trailhead for the current phase of the Licking River Greenway & Trail.



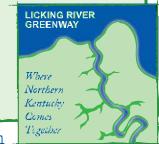
View underneath I-275 bridge in Wilder



Existing Kentucky Transportation Cabinet right-of-way along Route



Rendering: Proposed path through Route 9 right-of-way



Greenway & Trail Development

Initial Implementation Plan

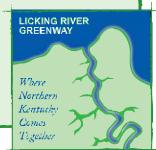
The initial implementation plan describes a single line trail route that can most easily or readily be accomplished. This route was shown by a solid red line on the Long-Range Plan and also is depicted in the Initial Implementation Plan. This route will be the first phase of the system and will be used to seek immediate funding. In the Initial Implementation Plan maps (following pages), yellow represents an on-street path, pink a gravel hiking path and red an off-street paved multi-purpose path. The trail sections selected for the Initial Implementation phase include:

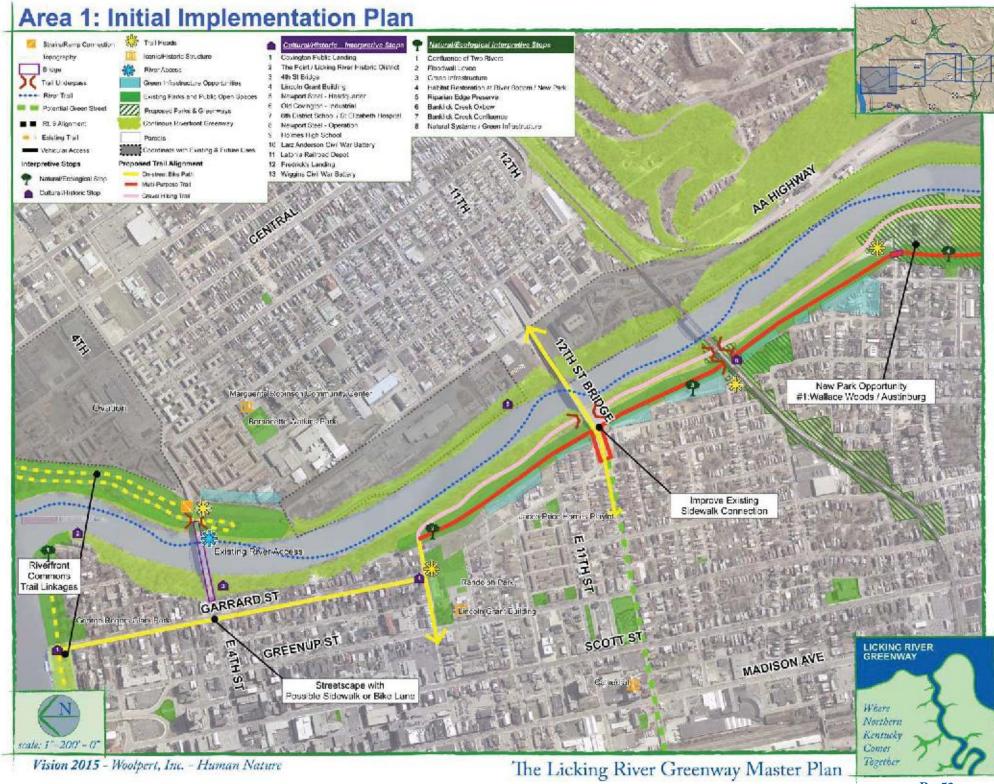
- Garrard Street from the Ohio River to Randolph Park
- Riverside and/or Top-of-levee from Randolph Park to Holmes High School
- On-street along Eastern Ave., James Ave. and Winchester Street to the old Latonia Depot new park site
- Across the Licking River on the refurbished Water District bridge to the expanded Frederick's Landing
- South through Latonia from the old Latonia Depot along the rail corridor and city streets to the VFV, Chappel Sports Complex and Covington Field
- South in Campbell County through Frederick's Landing, the Newport Steel parcel and the Kentucky Transportation Cabinet right-of-way along Route 9.
- South in Campbell County along Route 9 to the I-275 bridge right-of-way, following the slope down the interchange right-of-way under the bridge to a new trailhead site at Town and Country Sports Center.

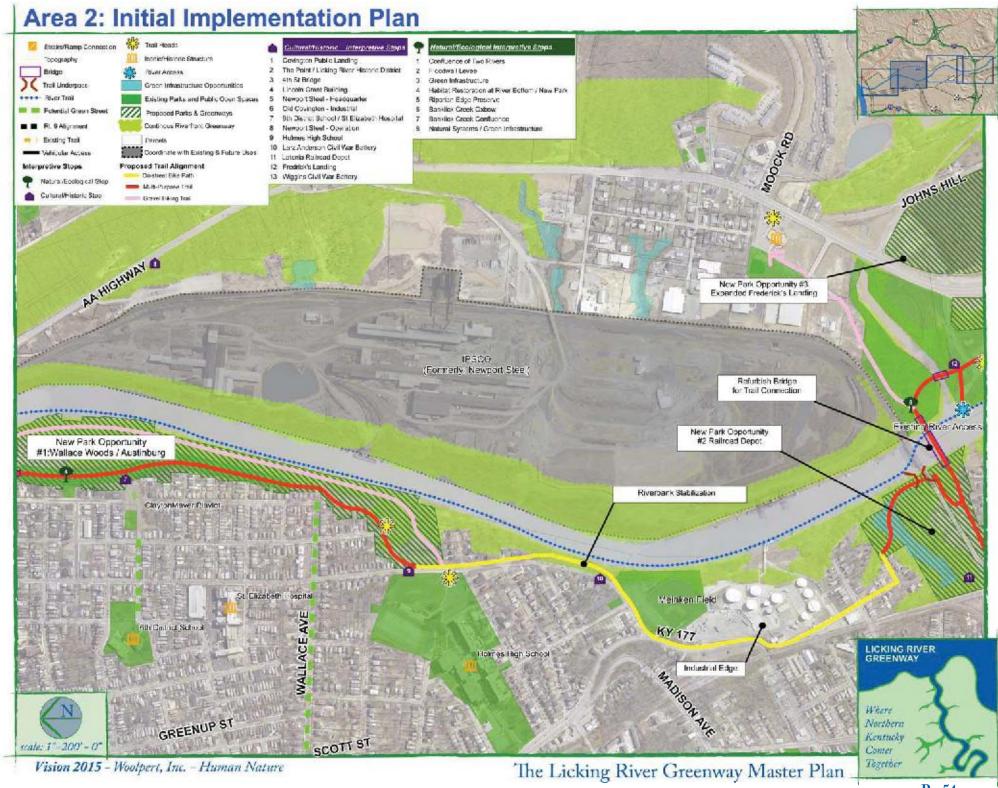


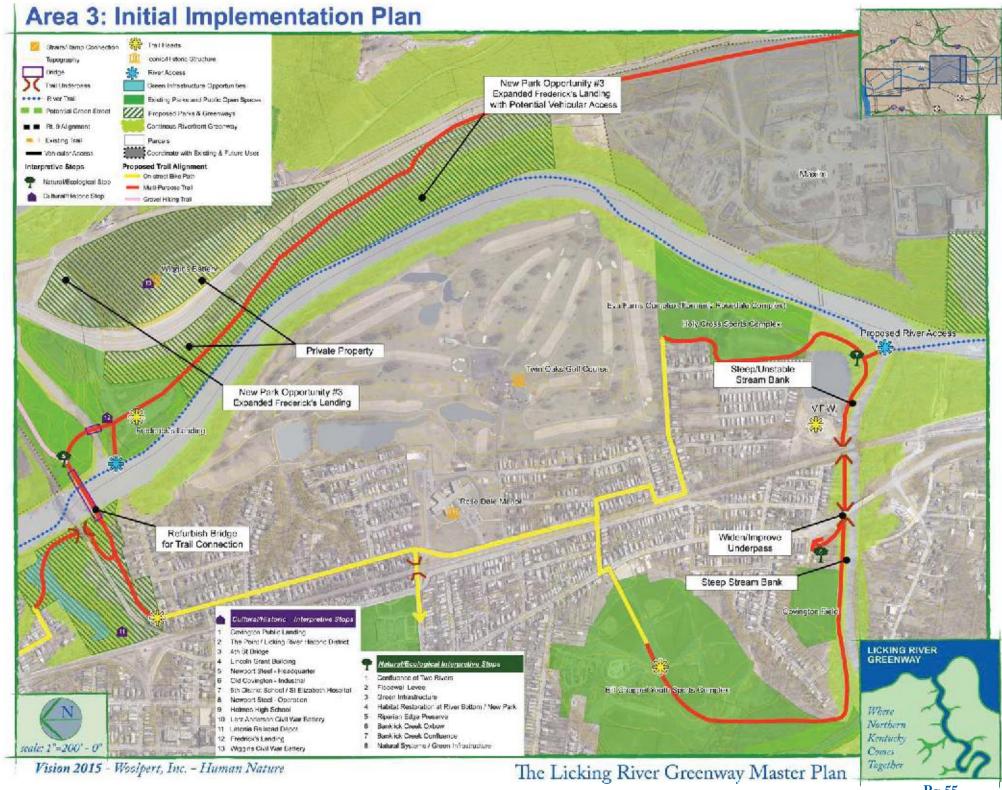


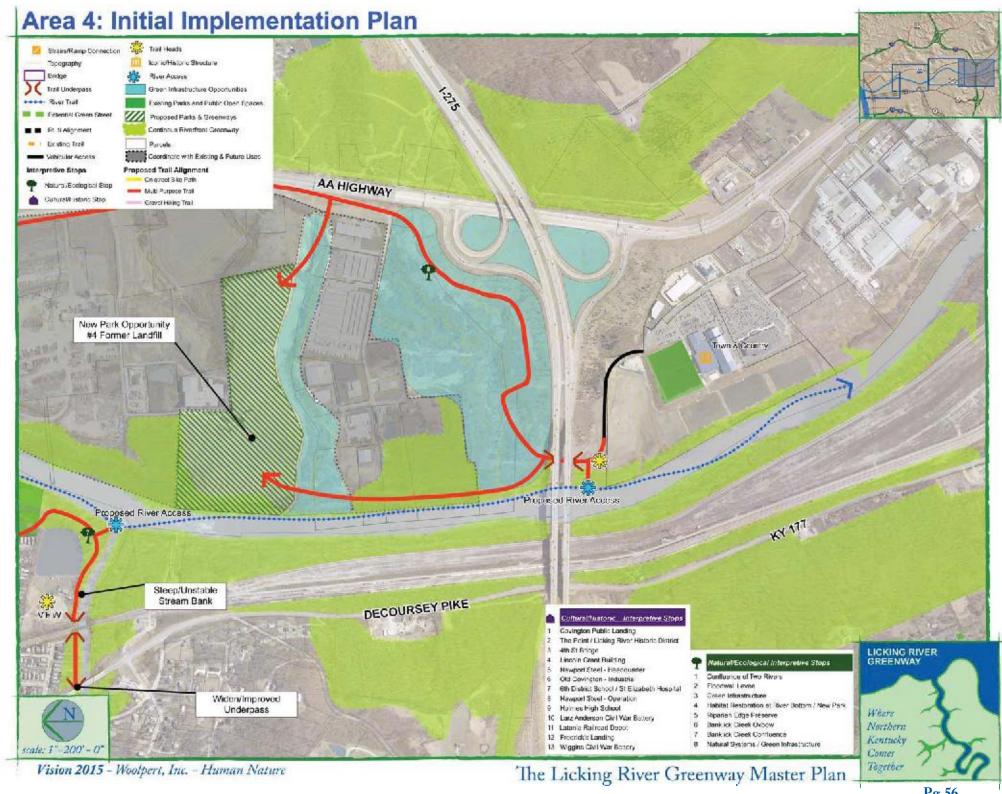
Holmes High School











Estimated Costs

Estimated Costs

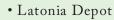
A planning level cost estimate was developed for the Initial Implementation Plan to gain a better understanding of the funding required to develop the greenway and trails. For purposes of this report, the cost estimate is a planning level opinion of the probable cost of constructing the improvements. More detailed cost analysis will be needed as specific components are designed in the future. Costs are broken down by trail sections, as depicted on the Initial Implementation Segment Plan. The estimated costs for each segment including labor, materials, design & engineering are shown in the table on the following page.

Four elements shown in the cost estimate require additional explanation; interpretive stops, amenity nodes, trailheads, and trailheads with water access.

- Interpretive Stops, as described in Chapter 3, feature interpretive signage related to cultural and natural features along the trail.
- Amenity nodes are located along the trail for resting, relaxing and orientation. These nodes feature a covered bench, trash receptacle, way finding signage and additional pavement to accommodate these features.
- Trailhead facilities provide a place to park an automobile and gain access to the trail or park facilities. Trailheads feature vehicular access, parking for 25 cars, a restroom/shelter building, benches, trash receptacles, picnic tables, lighting, landscaping and a paved connection to the trail. Some existing parks or recreation facilities can be utilized as trailhead facilities for the proposed trail. These existing facilities have been omitted from the cost estimate.

Trailhead opportunities along the corridor include the following locations:

- Randolph Park
- Austinberg Neighborhood Park
- Wallace Woods
- "Bowl" at Holmes High School
- Frederick's Landing

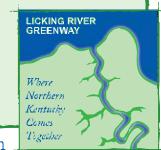


- Bill Cappel Youth Sports Complex
- VFW Property
- Town and Country Sports Complex

Finally, **trailheads with water access** have all the amenities of a trailhead, with the addition of a floating dock facility and ramp for canoe and/or kayak launching.

Water access opportunities along the corridor include the following:

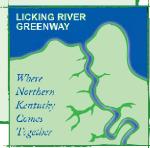
- Taylor Park in Newport under 4th Street Bridge
- Confluence of Banklick Creek near VFW in Covington
- Frederick's Landing boat launch
- Town and Country Sports Complex under I-275

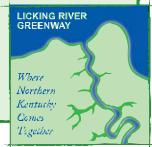


Estimated Costs (continued)

Sogmont	Project Type	Unit of Quantity	Quantity	Unit Cost Low End	Unit Cost High End	Total Cost Low End	Total Cost High End
Segment	Fioject Type	Offic of Qualitity	Quantity	LOW LIIU	riigii Liiu	LOW LIIU	Liiu
A-B						\$229,758	\$332,446
	On-street Bike Path	Linear feet	3397	\$14	\$18		
	Interpretive Stops	LS	4	\$500	\$1,500	\$2,000	\$6,000
	Trailhead	LS	1	\$180,200	\$265,300	\$180,200	\$265,300
B-C						\$2,087,666	\$2,891,194
	On-street Bike Path	Linear feet	221	\$14	\$18		
	Multi-Purpose Path	Linear feet	8807	\$36	\$48	\$317,052	\$422,736
	Gravel Hiking Path	Linear feet	8732	\$10	\$15	\$87,320	\$130,980
	Interpretive Stops	LS	6	\$500	\$1,500	\$3,000	\$9,000
	Trailhead	LS	3	\$180,200			\$795,900
	Ammenity Node	LS	7	\$5,100	\$8,200		
	Levee Bridge Crossing	LS	1	\$65,000	\$90,000	\$65,000	\$90,000
	New Park Development	Acre	34.53	\$30,000	\$40,000	\$1,035,900	\$1,381,200
C-D			_			\$5,348,758	\$7,900,274
	On-street Bike Path	Linear feet	4705	\$14	\$18	\$65,870	\$84,690
	Multi-Purpose Path	Linear feet	1933	\$36	\$48	\$69,588	\$92,784
	Interpretive Stops	LS	2	\$500	\$1,500	\$1,000	\$3,000
	Trailhead	LS	2	\$180,200	\$265,300	\$360,400	\$530,600
	New Park Development	Acre	17.73	\$30,000	\$40,000	\$531,900	\$709,200
	Riverbank Stabalization	SF	108000	\$40	\$60	\$4,320,000	\$6,480,000
D-E						\$590,106	\$724,083
	Multi-Purpose Path	Linear feet	1971	\$36	\$48	\$70,956	\$94,608
	Gravel Hiking Path	Linear feet	1865	\$10	\$15	\$18,650	\$27,975
	Interpretive Stops	LS	1	\$500	\$1,500	\$500	\$1,500
	Trailhead	LS	0	\$180,200	\$265,300		
	River Bridge Crossing	LS	1	\$500,000	\$600,000	\$500,000	\$600,000
D-H						\$582,788	\$801,509
	On-street Bike Path	Linear feet	7375	\$14	\$18	\$103,250	\$132,750
	Multi-Purpose Path	Linear feet	7333	\$36	\$48	\$263,988	\$351,984
	Interpretive Stops	LS	2	\$500	\$1,500	\$1,000	\$3,000
	Ammenity Node	LS	3	\$5,100	\$8,200	\$15,300	\$24,600
	Trailhead with Water Access	LS	1	\$199,250	\$289,175	\$199,250	\$289,175





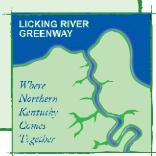


Estimated Costs (continued)

E-F						\$2,392,132	\$3,196,776
	Multi-Purpose Path	Linear feet	4937	\$36	\$48	\$177,732	\$236,976
	Interpretive Stops	LS	2	\$500	\$1,500	\$1,000	\$3,000
	Ammenity Node	LS	4	\$5,100	\$8,200	\$20,400	\$32,800
	New Park Development	Acre	73.1	\$30,000	\$40,000	\$2,193,000	\$2,924,000
F-G						\$1,667,986	\$2,259,523
	Multi-Purpose Path	Linear feet	13476	\$36	\$48	\$485,136	\$646,848
	Interpretive Stops	LS	1	\$500	\$1,500		\$1,500
	Ammenity Node	LS	8	\$5,100	\$8,200	\$40,800	\$65,600
	Trailhead with Water Access	LS	1	\$199,250	\$289,175	\$199,250	\$289,175
	New Park Development	Acre	31.41	\$30,000	\$40,000	\$942,300	\$1,256,400
Total						\$12,899,194	\$18,105,805
	On-street Bike Path	Linear feet	15698	\$14	\$18	\$219,772	\$282,564
	Multi-Purpose Path	Linear feet	38457	\$36	\$48	\$1,384,452	\$1,845,936
	Gravel Hiking Path	Linear feet	10597	\$10	\$15	\$105,970	\$158,955
	Interpretive Stops	LS	18	\$500	\$1,500	\$9,000	\$27,000
	Trailhead	LS	6	\$180,200	\$265,300	\$1,081,200	\$1,591,800
	Ammenity Node	LS	22	\$5,100	\$8,200	\$112,200	\$180,400
	Trailhead with Water Access	LS	2	\$199,250	\$289,175	\$398,500	\$578,350
	River Bridge Crossing	LS	1	\$500,000	\$600,000	\$500,000	\$600,000
	Levee Bridge Crossing	LS	1	\$65,000	\$90,000	\$65,000	\$90,000
	New Park Development	Acre	156.77	\$30,000	\$40,000	\$4,703,100	\$6,270,800
	Riverbank Stabalization	SF	108000	\$40	\$60	\$4,320,000	\$6,480,000

Note: LS represents a Lump Sum Quantity SF represents a Square Feet Quantity





Potential Funding Sources

Many public grants are available for the acquisition, development, and enhancement of public open space. Several private foundations are also possible sources of grants for tax exempt 501(c)(3) organizations. An overview of potential funding sources is provided in this section.

Grant themes that emerged during the master planning process included storm water management, trail systems, storm water detention, green space acquisition and recreation. Many of the grant opportunities foster partnering between municipalities and grant recipients. Partnering with area cities, businesses, schools, institutions, non-profits, and private donors give an edge to applicants with regard to grant eligibility and priority rating for funding.

While grant opportunities can help leverage local funding, they are competitive and cannot be expected to cover all capital funding for the projected park improvements. Some form of public funding should be considered as a potential primary source for funding required for capital improvement and operating costs. Municipalities should consider providing funding for the greenway through the general budget or capital improvement plans.

Federal Funding Opportunities

USACE

http://www.lrl.usace.army.mil/

The Army Corps of Engineers' (USACE) primary mission is to maintain navigation on the nation's navigable waterways. In the past, the USACE has been involved in the implementation of recreational river corridor projects. Recreational projects are no longer ranked as favorably because priorities and resources shifted after Hurricane Katrina. However, components of the Licking River Greenway & Trails Plan which address riverbank erosion and stability may be eligible for USACE involvement where public facilities such as sewer infrastructure are threatened.

U.S. EPA

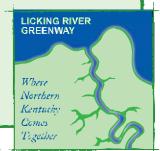
http://www.epa.gov/ogd/grants/funding_opportunities.htm

The United States Environmental Protection Agency (U.S EPA) recently awarded a one-time grant to the City of Covington for the design and implementation of a pilot project which will demonstrate innovative approaches to riverbank stabilization and river debris pollution control. Additional funding programs for riverbank stabilization, storm water management and green infrastructure may be available thru the U.S. EPA.

State and Local Funding Alternatives

Kentucky Transportation Cabinet - Low Interest Loans

Among the state sources of funding for municipal improvement projects are grants and low interest loans. These grant funds are managed through the Kentucky Transportation Cabinet (KTC), the Governor's Office for Local Development (GOLD) and the Kentucky League of Cities (KLC). Specific information about each fund can be found on the following websites (http://transportation.ky.gov), (http://www.gold.ky.gov), (http://www.KLC.org).



Potential Funding Sources (continued)

Kentucky Transportation Cabinet-Funding Sources for Bicycle and Pedestrian Projects

http://bikewalk.ky.gov/bike_funding2.pdf

http://www.epa.gov/piedpage/topics/transportation_funding.htm

The primary source of federal funding for greenways, pedestrian and bicycle paths is through the Transportation Equity Act of 1998 (TEA21). TEA21 funding that applies to greenway enhancement and pedestrian/bicycle paths is managed by the state and includes the following:

STP funds

These funds can be used for bicycle and pedestrian facility construction or nonconstruction projects such as brochures, public service announcements, and route maps. The projects must be related to bicycle and pedestrian transportation and must be part of the Six-Year Highway Plan. The OKI Regional Council of Governments incorported such projects into the Transportation Improvement Program (TIP).

• Transportation Enhancement Program

Transportation Enhancements include projects such as trails, greenways, sidewalks, signage, bikeways, safety education and wildlife undercrossings. A 20 percent match of local funds is required. Some states will accept donations of services, materials, etc. Federal grants are usually for construction only - not front-end costs of design, environmental review, engineering, or land acquisition. Local government pays up front and the federal share is reimbursed after satisfactory completion.

• Recreational Trails Program

National Recreational Trails fund monies may be used for a variety of recreational trails programs to benefit bicyclists, pedestrians, and other non-motorized and motorized users. Projects must be consistent with a Statewide



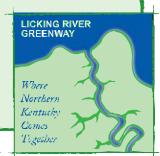
Comprehensive Outdoor Recreation Plan (SCORP) required by the Land and Water Conservation Fund Act. Funds may be used to provide and maintain trails, trail side and trailhead facilities including provisions to facilitate access for people with disabilities. Funds may also be used to acquire easements or land to develop and renovate for both motorized and non-motorized use. Eligible applicants are cities, counties, and non-profit organizations.

• Federal Lands Highway Program

Federal Lands Highway funds (Section 1032) may be used to construct pedestrian walkways and bicycle transportation facilities in conjunction with roads, highways, and parkways at the discretion of the department charged with the administration of such funds.

• National Scenic Byways Program

The Kentucky Transportation Cabinet currently has 1,250 miles of roadways designated as Scenic Byways. The Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991 established a Scenic Byways Advisory Committee to develop a national scenic byways program. ISTEA further encouraged the individual states to institute state scenic byway programs. The Commonwealth of Kentucky through the Transportation Cabinet has initiated a Scenic Highways and Byways Program. Kentucky defines a scenic highway or byway as a road, which has roadsides or view sheds of aesthetic, cultural, historical, and/or archaeological value worthy of preservation, restoration, protection, and enhancement.



Potential Funding Sources (continued)

• Transit Enhancement Activity

Federal Transit Title III (related to TEA-21) funding continues to allow transit funds to be used for bicycle and pedestrian access to transit facilities, to provide shelters and parking facilities for bicycles in or around transit facilities, or to install racks or other equipment for transporting bicycles on transit vehicles.

Kentucky Transportation Cabinet-Funding Sources for Bicycle and Pedestrian Projects

• TCSP Program

The TCSP provides funding for a comprehensive initiative including planning grants, implementation grants, and research to investigate and address the relationships between transportation and community and system preservation and to identify private sector-based initiatives. The TCSP is a Federal Highway Administration program being jointly developed with the Federal Transit Administration, the Federal Rail Administration, the Office of the Secretary, the U. S. Department of Transportation, and the U. S. EPA. States, metropolitan planning agencies, and local governments are eligible to receive planning and implementation grants for projects that reduce impacts of transportation on the environment, reduce the need for costly future infrastructure investments, and improve the efficiency of the transportation system. Projects involving partnerships among public and private sectors are given priority.

Governor's Office for Local Development (GOLD)

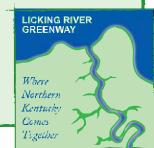
The greenway's partner cities may also be eligible for two grants offered through the Governor's Office for Local Development program: the Area Development Fund (ADF) and the Kentucky Small Cities Community Development Block Grant (CDBG) program. The ADF can be used for capital projects that range from the acquisition of real property to the installation of water, gas, sewer and electrical lines to public facilities and industrial sites. The Small Cities CDBG program is funded through the U.S. Department of Housing and Urban Development (HUD). It provides

assistance to small communities for revitalizing neighborhoods, expanding affordable housing and economic opportunities, providing infrastructure and improving community facilities and services.

Renaissance on Main

Also funded through the GOLD program is the Renaissance on Main Program which supports revitalization of downtown districts in Kentucky cities. Grants are available through the Renaissance on Main program to those cities established as Certified "Renaissance on Main Cities" in the current year of eligibility. Certified Main Street Cities are eligible for grants that can be applied towards streetscape projects. Grant funds must be used for capital projects that contribute to community and downtown revitalization projects in eligible cities. Eligible projects are real estate acquisition and/or facility renovation, new facility construction, facade program, and streetscapes. All streetscape and facade activities which are part of a project must be accomplished in accordance with guidelines, rules and regulations as published by the Kentucky Heritage Council and the Kentucky Transportation Cabinet. Further information on the Renaissance on Main program can be obtained at:

(http://www.state.ky.us/agencies/khc/kyheritage_mainstreet.htm)



Potential Funding Sources (continued)

Kentucky Association of Counties Leasing Trust

http://www.kaco.org/Member+Services/Financial+Services/KACo+Leasing+Trust+%28CoLT%29.htm

The Kentucky Association of Counties, through its affiliate, the Kentucky Association of Counties Leasing Trust, has financing programs that are very similar to those provided by KLC, but that are available for counties and special districts in the Commonwealth of Kentucky

Regional Park Authority

http://www.lrc.ky.gov/KRS/097-00/095.PDF

Under Section 97.095 of the Kentucky Revised Statutes, two or more counties may form a regional park authority for the purpose of acquiring, building, operating, and maintaining parks and green space. A regional park authority may be established by a vote of the fiscal courts of the participating counties or by a vote of the majority of the voters in each participating county voting in an election. A regional park authority may levy taxes not exceeding five cents (\$0.05) on each one hundred dollars of all taxable property within the regional park authority's boundaries. The tax may not be levied until a majority of the voters in each county approves the tax.

Regional Parks Foundation

http://www.regionalparksfoundation.org/Page.aspx?pid=191

A foundation created for the purpose of funding parks and green space could be created. A nonprofit 501(c)(3) corporation would have the ability to raise charitable contributions on a regional basis and would qualify for grants from foundations that support environmental, recreational and preservation projects.

Northern Kentucky Consensus Committee

http://www.nkychamber.com/CWT/External/index.aspx

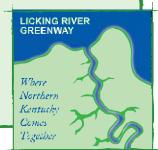


The Northern Kentucky Chamber of Commerce supports the priority project needs identified and prioritized by the businesses, governments and agencies represented on the Northern Kentucky Consensus Committee. The Committee prepares a priority list of projects that is presented to the Northern Kentucky legislative delegation for Kentucky General Assembly sessions occurring in even numbered years. The list endorses projects for direct funding as "community development projects" in the Commonwealth's biennial budget. Riverfront Commons and Covington Riverfront West were included in the list submitted for the 2006 budget session.

Kentucky Recreational Trails Authority

 $http://www.kentuckytourism.com/NR/rdonlyres/7FDBEB96-56E3-4253-8EED-915E241A1436/0/KRTAStrategicPlan_053007.pdf$

The purpose of this authority is to enhance Kentucky's economy by expanding tourism opportunities for motorized and non motorized off-road trail activities, including hiking, cycling, horseback riding, and off-highway vehicle riding.



Potential Funding Sources (continued)

Additional Funding Strategies and/or Resources

There are additional funding strategies that other municipalities have successfully implemented over the years. Some of those mechanisms are listed below.

- •Local Capital Improvement Program Funds Taxes funding through sales tax revenues
- •Impact Fees monetary one-time charges levied by local government on new development
- •Bond Referendums require public support of the voting population
- •Local Capital Improvement Program solicits financial support from local foundations and businesses and conservation-minded benefactors
- •Local Businesses cash donations, donation of services for installation, reduction of material costs, etc. to reduce the cost of installation and maintenance of local greenways
- •Trail Sponsors a sponsorship program for trail amenities at various locations
- •Volunteer Work community assistance week construction and fund raising.
- •"Buy-a-Foot" Programs citizens are encouraged to buy one linear foot of the greenway by donating the cost of construction.
- •Developer Dedications used to either obtain land for the greenway system or have a developer pass the cost of new sidewalks, trails and amenities to the new owner
- •American Greenway DuPont Awards small grants for mapping, conducting ecological assessments, surveying land, holding conferences, developing brochures, producing interpretive displays, incorporating land trusts, building trails, and other projects

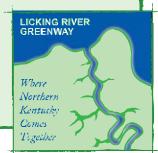


•Health Departments and regional wellness communities sponsor programs and funding for public walking, jogging and bicycling facilities.

Kentucky League of Cities

http://www.klc.org/

The Kentucky League of Cities provides financial assistance in addition to other services to cities in the Commonwealth of Kentucky. The Financial Services Department of KLC provides tax-exempt financing to communities through tax-exempt bond pools. KLC has been a provider of low-cost financing to Kentucky communities since 1987 funding more that \$500 million in capital improvement projects and equipment purchases.



Implementation- A Call to Action

As the master planning phase of the Licking River greenway ends, the implementation phase is already beginning. Actions are underway to create an organization that will focus on the long-term goal of transforming the master plan into reality. This new organization will advance the project on several fronts by continuing to engage the public, recruit additional volunteers, and pursue diverse funding opportunities. It also will explore connections with other trail systems and potential new river access points.

If you are excited about this master plan and eager for its implementation, it's important to remember such an ambitious project will require time, patience, persistence, and collaboration among many partners in our region. Yet this is a project where individuals can make a difference right in their own neighborhoods. The list on this page presents several trail segments that can be completed most readily. Maybe you can help get one of those segments "on the ground" near where you live or work. A lesson learned in other communities is that as greenways segments are completed, momentum builds and accelerates to develop new segments and link them into a unified system. We're hoping that will happen with the Licking River Greenway and Trails.

In addition, many parcels along the riverfront are ripe for a change of ownership and/or may have potential for redevelopment in the coming years. It is important that neighborhood and community leaders remain aware of activity associated with riverfront parcels, as they represent an opportunities for future greenway access through the purchase of easements or conversion to land uses that are more compatible with the greenway and trails.

To learn more about the effort and how you can get involved, please visit our web site:

www.vision2015.org/licking_greenway/index.html or simply type in "Licking River Greenway" in your preferred search engine.

Implementing the Licking River Greenway and Trails system will require a deep community commitment, but offers an amazing opportunity to bring Northern Kentucky together!



Trail Segments Ready for Action

- Riverside greenway and trail from Randolph Park to Holmes High School in Covington
- On-street trail through Latonia from Latonia Depot to Bill Chappel Sports Complex and the VFW
- New park opportunity at Latonia Depot
- · Expansion of trails at Frederick's Landing
- · New river access points also will be explored

